

Doc. Ref. FP56 (4 of 7)  
 Appl. No. 10/553,685

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Pro Ala Ala His Ala Lys His Gly Ser Arg Asp Gly Ser Thr Gln Thr		
785	790	795
Asp Gly Pro Pro Asp Ser Thr Ser Thr Cys Leu Pro Pro Glu Pro Asp		
805	810	815
Ser Leu Leu Gly Cys Ser Ser Ser Gln Arg Ala Ala Ser Leu Asp Ser		
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 <211> 2595  
 <212> DNA  
 <213> Homo sapiens

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<210> 3252  
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 <212> PRT  
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<400> 3252  
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 35 40 45  
 Leu Glu Asp Val Ser Arg Gly Gly Ser Pro Phe Ala Ile Val Ile Thr  
 50 55 60  
 Gln Gln His Gln Ile His Arg Ser Cys Thr Val Asn Ile Met Phe Gly  
 65 70 75 80  
 Thr Pro Gln Glu His Arg Asn Met Pro Gln Ala Asp Ala Met Val Leu  
 85 90 95  
 Val Ala Arg Asn Tyr Glu Arg Tyr Lys Asn Glu Cys Arg Glu Lys Glu  
 100 105 110  
 Arg Glu Glu Ile Ala Arg Gln Ala Lys Met Ala Asp Glu Ala Ile  
 115 120 125  
 Leu Gln Glu Arg Glu Arg Gly Gly Pro Glu Glu Gly Val Arg Gly Gly  
 130 135 140  
 His Pro Pro Ala Ile Gln Ser Leu Ile Asn Leu Leu Ala Asp Asn Arg  
 145 150 155 160  
 Tyr Leu Thr Ala Glu Glu Thr Asp Lys Ile Ile Asn Tyr Leu Arg Glu  
 165 170 175  
 Arg Lys Glu Arg Leu Met Arg Ser Ser Thr Asp Ser Leu Pro Gly Glu  
 180 185 190  
 Leu Arg Gly Arg Pro Arg Pro Asp Phe Pro Pro Thr Thr Arg Gly Asp  
 195 200 205  
 Leu Gly Cys Leu Ala Glu Asp Thr Ala Lys Leu Pro Thr Ala Pro Glu  
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 <212> DNA  
 <213> Homo sapiens

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<210> 3254

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3254

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		20						25					30		
Tyr	Ser	Arg	Val	Thr	Pro	Gln	Glu	Gln	Ala	Lys	Leu	Asp	Ala	Gln	Leu
		35					40					45			
Arg	Asp	Lys	Glu	Phe	Tyr	Arg	Pro	Ile	Pro	Asn	Pro	Asn	Pro	Lys	Leu
	50					55				60					
Thr	Asp	Gly	Tyr	Pro	Ala	Phe	Lys	Arg	Pro	His	Met	Thr	Ala	Lys	Asp
65					70					75				80	
Leu	Gly	Leu	Pro	Gly	Phe	Phe	Pro	Ser	Gln	Glu	His	Glu	Ala	Thr	Arg
			85					90						95	
Glu	Asp	Glu	Arg	Lys	Phe	Thr	Ser	Thr	Cys	His	Phe	Thr	Tyr	Pro	Ala
		100						105					110		
Ser	His	Asp	Leu	His	Leu	Ala	Gln	Gly	Asp	Pro	Asn	Gln	Val	Leu	Gln
		115					120					125			
Ser	Ala	Asp	Phe	Pro	Cys	Leu	Val	Asp	Pro	Lys	His	Gln	Pro	Ala	Ala
	130					135					140				
Glu	Met	Ala	Lys	Gly	Tyr	Leu	Leu	Leu	Pro	Gly	Cys	Pro	Cys	Leu	His
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Cys	His	Ile	Val	Lys	Val	Pro	Ile	Leu	Asn	Arg	Trp	Gly	Pro	Leu	Met
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Pro	Phe	Tyr	Gln												
			180												

<210> 3255

<211> 724

<212> DNA

<213> Homo sapiens

<400> 3255

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 300  
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 360  
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 420  
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&lt;210&gt; 3256

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3256

Ser	Cys	Leu	Gln	Thr	Arg	Glu	Glu	Ile	Leu	Ala	Asp	Thr	Ser	Gln	Leu
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Ala	Ala	Asn	Pro	Glu	Gly	Ser	Ala	Glu	Pro	Arg	Lys	Glu	Tyr	Glu	Gly
			20					25					30		
Gly	Arg	Asn	Glu	Ala	Gly	Glu	Arg	His	Gly	Arg	Gly	Arg	Ala	Arg	Leu
		35					40					45			
Pro	Asn	Gly	Asp	Thr	Tyr	Glu	Gly	Ser	Tyr	Glu	Phe	Gly	Lys	Arg	His
	50					55				60					
Gly	Gln	Gly	Ile	Tyr	Lys	Phe	Lys	Asn	Gly	Ala	Arg	Tyr	Ile	Gly	Glu
65					70					75				80	
Tyr	Val	Arg	Asn	Lys	Lys	His	Gly	Gln	Gly	Thr	Phe	Ile	Tyr	Pro	Asp
			85					90					95		
Gly	Ser	Arg	Tyr	Glu	Gly	Glu	Trp	Ala	Asn	Asp	Leu	Arg	His	Gly	His
		100						105					110		
Gly	Val	Tyr	Tyr	Tyr	Ile	Asn	Asn	Asp	Thr	Tyr	Thr	Gly	Glu	Trp	Phe
		115				120						125			
Ala	His	Gln	Arg	His	Gly	Gln	Gly	Thr	Tyr	Leu	Tyr	Ala	Glu	Thr	Gly
	130					135					140				
Ser	Lys	Tyr	Val	Gly	Thr	Trp	Val	Asn	Gly	Gln	Gln	Glu	Gly	Thr	Ala
145					150					155					160
Glu	Leu	Ile	His	Leu	Asn	His	Arg	Tyr							

165

&lt;210&gt; 3257

&lt;211&gt; 368

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3257

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tggcgcgc
368

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&lt;210&gt; 3258

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3258

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Pro Thr Phe Ser Arg Ser Pro His His Tyr Tyr Arg Ser Gly Asp Leu
      20             25             30
Ser Thr Ala Thr Lys Ser Glu Thr Ser Glu Asp Ile Ser Gln Thr Ser
      35             40             45
Lys Tyr Ser Pro Ile Tyr Ser Pro Asp Pro Tyr Tyr Ala Ser Glu Ser
      50             55             60
Glu Tyr Trp Thr Tyr His Gly Ser Pro Lys Val Pro Arg Ala Arg Arg
      65             70             75             80
Phe Ser Ser Gly Gly Glu Glu Asp Asp Phe Asp Arg Ser Met His Lys
      85             90             95
Leu Gln Ser Gly Ile Gly Arg Leu Ile Leu Lys Glu Glu Met Lys Ala
      100            105            110
Arg Ser Ser Ser Tyr Ala Asp Pro Trp Arg
      115            120

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&lt;210&gt; 3259

&lt;211&gt; 747

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3259

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<211> 197

<212> PRT

<213> Homo sapiens

<400> 3260

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		20						25					30		
Gly	Ser	Glu	Val	Asp	Arg	Val	Ile	Leu	Lys	Ala	Asn	Glu	Thr	Phe	Ala
	35					40					45				
Phe	Val	Gly	Asn	Val	Thr	His	Tyr	Ala	Gln	Val	Trp	Leu	Asn	Ile	Ser
	50				55						60				
Ala	Glu	Ile	Arg	Ser	Phe	Leu	Glu	Gln	Gly	Arg	Leu	Gln	Gln	His	Leu
65					70				75					80	
Arg	Trp	Leu	Gln	Gln	Tyr	Val	Ala	Glu	Leu	Arg	Leu	His	Pro	Glu	Ala
			85					90					95		
Leu	Asn	Leu	Ser	Leu	Asp	Glu	Leu	Pro	Pro	Ala	Leu	Arg	Gln	Asp	Asn
		100						105					110		
Phe	Ser	Leu	Pro	Ser	Gly	Met	Ala	Leu	Leu	Gln	Gln	Leu	Asp	Thr	Ile
	115					120					125				
Asp	Asn	Ala	Ala	Cys	Gly	Trp	Ile	Gln	Phe	Met	Ser	Lys	Val	Ser	Val
	130				135					140					
Asp	Ile	Phe	Lys	Gly	Phe	Pro	Asp	Glu	Glu	Ser	Ile	Val	Asn	Tyr	Thr
145				150				155						160	
Leu	Asn	Gln	Ala	Tyr	Gln	Asp	Asn	Val	Thr	Val	Phe	Ala	Ser	Val	Ile
			165					170					175		
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<212> DNA  
<213> Homo sapiens

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<210> 3262  
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<212> PRT  
<213> Homo sapiens

<400> 3262  
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Glu Phe Asp Lys Phe Leu Glu Glu Arg Ala Lys Ala Ala Glu Met Val  
35 40 45  
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Pro Ser Gly Arg Lys Lys Pro Glu Arg Ser Glu Asp Ala Leu Phe Ala  
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<210> 3263  
<211> 1128  
<212> DNA  
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780

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 900  
 tcggaggccc tggacagga gagctgagcc gcgggcagcc aggcccagcc cccgcccag  
 960  
 ctcaggctgc ccctctcctt ccccggtctg caggagagca gagcagagaa ctgtggggaa  
 1020  
 cgctgtgctg tttgtatttg ttcccttggg ttttttttct ctgcctaatt tctgtgattt  
 1080  
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<210> 3264

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3264

Ser	Arg	Tyr	Arg	Arg	Ser	Ser	Gly	Asp	Glu	Leu	Arg	Glu	Asp	Asp	Glu
1				5					10					15	
Pro	Val	Lys	Lys	Arg	Gly	Arg	Lys	Gly	Arg	Gly	Arg	Gly	Pro	Pro	Ser
		20						25					30		
Ser	Ser	Asp	Ser	Glu	Pro	Glu	Ala	Glu	Leu	Glu	Arg	Glu	Ala	Lys	Lys
		35					40					45			
Ser	Ala	Lys	Lys	Pro	Gln	Ser	Ser	Ser	Thr	Glu	Pro	Ala	Arg	Lys	Pro
	50					55				60					
Gly	Gln	Lys	Glu	Lys	Arg	Val	Arg	Pro	Glu	Glu	Lys	Gln	Gln	Ala	Lys
65					70					75				80	
Pro	Val	Lys	Val	Glu	Arg	Thr	Arg	Lys	Arg	Ser	Glu	Gly	Phe	Ser	Met
				85					90					95	
Asp	Arg	Lys	Val	Glu	Lys	Lys	Lys	Glu	Pro	Ser	Val	Glu	Glu	Lys	Leu
			100					105				110			
Gln	Lys	Leu	His	Ser	Glu	Ile	Lys	Phe	Ala	Leu	Lys	Val	Asp	Ser	Pro
	115						120					125			
Asp	Val	Lys	Gly	Cys	Leu	Asn	Ala	Leu	Glu	Glu	Leu	Gly	Thr	Leu	Gln
	130					135					140				
Val	Thr	Ser	Gln	Ile	Leu	Gln	Lys	Asn	Thr	Asp	Val	Val	Ala	Thr	Leu
145					150					155				160	
Lys	Lys	Ile	Arg	Arg	Tyr	Lys	Ala	Asn	Lys	Asp	Val	Met	Glu	Lys	Ala
			165						170					175	
Ala	Glu	Val	Tyr	Thr	Arg	Leu	Lys	Ser	Arg	Val	Leu	Gly	Pro	Lys	Ile
			180					185					190		
Glu	Ala	Val	Gln	Lys	Val	Asn	Lys	Ala	Gly	Met	Glu	Lys	Glu	Lys	Ala
	195						200					205			
Glu	Glu	Lys	Leu	Ala	Gly	Glu	Glu	Leu	Ala	Gly	Glu	Glu	Ala	Pro	Gln
	210					215					220				
Glu	Lys	Ala	Glu	Asp	Lys	Pro	Ser	Thr	Asp	Leu	Ser	Ala	Pro	Val	Asn
225				230						235				240	
Gly	Glu	Ala	Thr	Ser	Gln	Lys	Gly	Glu	Ser	Ala	Glu	Asp	Lys	Glu	His
			245						250					255	
Glu	Glu	Gly	Arg	Asp	Ser	Glu	Glu	Gly	Pro	Arg	Cys	Gly	Ser	Ser	Glu
			260					265					270		
Asp	Leu	His	Asp	Ser	Val	Arg	Glu	Gly	Pro	Asp	Leu	Asp	Arg	Pro	Gly

275                      280                      285  
 Ser Asp Arg Gln Glu Arg Glu Arg Ala Arg Gly Asp Ser Glu Ala Leu  
 290                      295                      300  
 Asp Glu Glu Ser  
 305

<210> 3265  
 <211> 524  
 <212> DNA  
 <213> Homo sapiens

<400> 3265  
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 60  
 ctttttcgtg gttttcaaaa tgtttccatt gagggcgtat tacttttata atcaacaaaa  
 120  
 gagaaagtat aacttcattt tagaaattct cacctaaggc atttgaaaaa taatccaaaa  
 180  
 ggtacattat tgttgatttt tcttccttct agaaaggatc ttgttcgagt agaagccaca  
 240  
 gtcattgaaa agacagaatc atggccaaga atcattatga gattcaggaa aaggaaaaac  
 300  
 ttcaagaaga aaagaagtaa gttagagaaa gtaccgctgg gccctgttgc acggtgctgg  
 360  
 ttgccaggc gcatgaggac ggaggggtgtg gggcacgtgg gtctcgggac aggaagccca  
 420  
 ggcaggtctc aacctggctg ccaactgccc cttgccccc tcatacctaga gggagcacc  
 480  
 agaggggtcca gcctcgctcc ctttctctc cacgctccac gcgt  
 524

<210> 3266  
 <211> 82  
 <212> PRT  
 <213> Homo sapiens

<400> 3266  
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 1                      5                      10                      15  
 Glu Lys Val Pro Leu Gly Pro Val Ala Arg Cys Trp Leu Pro Arg Arg  
 20                      25                      30  
 Met Arg Thr Glu Gly Val Gly His Val Gly Leu Gly Thr Gly Ser Pro  
 35                      40                      45  
 Gly Arg Ser Gln Pro Gly Cys His Cys Pro Leu Ala Thr Leu Ile Leu  
 50                      55                      60  
 Glu Gly Ala Pro Arg Gly Ser Ser Leu Ala Pro Leu Leu Leu His Ala  
 65                      70                      75                      80  
 Pro Arg

<210> 3267  
 <211> 393  
 <212> DNA  
 <213> Homo sapiens

&lt;400&gt; 3267

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60  
tggaatacat tgaataaaaa ggtcgcacaa agaattgcac agctacagga agctttgttg  
120  
cattgtggga agtttcaaga tgccttggag ccattgctca gctggttggc agataccgag  
180  
gagctcatag ccaatcagaa acctccatct gctgagtata aagtggtgaa agcacagatc  
240  
caagaacaga agttgctcca gcggctccta gatgatcgaa aggccacagt agacatgctt  
300  
caagcagaag gaggcagaat agcccagtca gcagagctgg ctgatagaga gaaaatcact  
360  
ggacagctgg agagtcttga aagtagatgg act  
393

&lt;210&gt; 3268

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3268

Val	Glu	Tyr	Ala	Cys	Arg	Val	Gln	Gly	Leu	Glu	His	Asp	Met	Glu	Glu
1				5					10					15	
Ile	Asn	Ala	Arg	Trp	Asn	Thr	Leu	Asn	Lys	Lys	Val	Ala	Gln	Arg	Ile
			20					25					30		
Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu	His	Cys	Gly	Lys	Phe	Gln	Asp	Ala
		35				40						45			
Leu	Glu	Pro	Leu	Leu	Ser	Trp	Leu	Ala	Asp	Thr	Glu	Glu	Leu	Ile	Ala
		50			55					60					
Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu	Tyr	Lys	Val	Val	Lys	Ala	Gln	Ile
65					70				75					80	
Gln	Glu	Gln	Lys	Leu	Leu	Gln	Arg	Leu	Leu	Asp	Asp	Arg	Lys	Ala	Thr
			85					90						95	
Val	Asp	Met	Leu	Gln	Ala	Glu	Gly	Gly	Arg	Ile	Ala	Gln	Ser	Ala	Glu
		100					105					110			
Leu	Ala	Asp	Arg	Glu	Lys	Ile	Thr	Gly	Gln	Leu	Glu	Ser	Leu	Glu	Ser
		115					120					125			
Arg	Trp	Thr													
		130													

&lt;210&gt; 3269

&lt;211&gt; 1423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3269

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60  
tttgaagctg taactttatg agcgattatt tactaccttt gagaaatgtg ttttagtata  
120  
aaatatagga tgtggaagcg aaaaaatatt tgggtagcaa gtgaggtgta ctcaaaaata  
180

agcaaaagtc acgtgggtct gattttatac cctcgctgga aagcttggtc tcagacacac  
 240  
 tgttactgca agtgtgtgtg agggggaaac tctcacacac tttgcagttg aggacagggc  
 300  
 tagactttga ggtggaccct ggctcccagg gctgtgtact ccagccccgt gtttctcttt  
 360  
 tgctcagact gaacaagtgg aacgaaatta cattaagaa aagaaggcag cagtgaagaa  
 420  
 atttgaagac aagaagggtg agctgaaaga gaacctgatt gctgagctag aagaaaagaa  
 480  
 gaaaatgatt gaaaacgaaa tgctgacaat ggaactgaat ggagattcta tggagggtgaa  
 540  
 acctatcatg accagaaagt tgccggaggcg accaaatgat cccgtcccca tcccagacaa  
 600  
 gaggaggaaa cctgctccag ccagctaaa ctatttgta acagatgaac agatcatgga  
 660  
 ggatctgaga acattaaata agcttaagtc acccaagaga ccagcatctc catcctctcc  
 720  
 tgagcacttg cctgcaacac ccgcggaatc tccagcacag agatttgagg cgcggataga  
 780  
 agatggcaaa ctgtattatg acaaagatg gtaccacaag agccaggcca tctatctgga  
 840  
 gtcaaaggac aaccagaaac tgagctgcgt gatcagttct gtaggagcca atgagatctg  
 900  
 ggtgaggaag acaagtgaca gcaccaagat gaggatctac ctgggtcagc ttcagcgagg  
 960  
 gctcttcgtg atccgcggc gctcagctgc ttgactttct acagtgtctt tctcttgacc  
 1020  
 ctttttcttg agtgggtttt atttttgttt tgtttcgttt tctccttaat agaaaaatgt  
 1080  
 taacttactg ggaatagcta ctcagccttg gaaatggaga gcactgcagt gaattcttta  
 1140  
 gggcactttt gtggccggat gcttccaact ttgtcagttt tttctgcctc aacttcttcc  
 1200  
 agacatcagt caccatgaga ctgttttact ttcaggcgta ttggggggtt tgatttactt  
 1260  
 tccttttatt tctttatttt ttgcttatac ttgtttttga aaacctctc tgagtttgaa  
 1320  
 gggacagcta tttttattga ttatctttaa gtctctctac catggagaag agcaggaagg  
 1380  
 gatacactct ccagtgcatt ttcattgttt gaatcggatt agt  
 1423

&lt;210&gt; 3270

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3270

Met	Ile	Glu	Asn	Glu	Met	Leu	Thr	Met	Glu	Leu	Asn	Gly	Asp	Ser	Met
1				5					10					15	
Glu	Val	Lys	Pro	Ile	Met	Thr	Arg	Lys	Leu	Arg	Arg	Arg	Pro	Asn	Asp
			20						25				30		
Pro	Val	Pro	Ile	Pro	Asp	Lys	Arg	Arg	Lys	Pro	Ala	Pro	Ala	Gln	Leu

```

      35      40      45
Asn Tyr Leu Leu Thr Asp Glu Gln Ile Met Glu Asp Leu Arg Thr Leu
  50      55      60
Asn Lys Leu Lys Ser Pro Lys Arg Pro Ala Ser Pro Ser Ser Pro Glu
  65      70      75      80
His Leu Pro Ala Thr Pro Ala Glu Ser Pro Ala Gln Arg Phe Glu Ala
      85      90      95
Arg Ile Glu Asp Gly Lys Leu Tyr Tyr Asp Lys Arg Trp Tyr His Lys
      100      105      110
Ser Gln Ala Ile Tyr Leu Glu Ser Lys Asp Asn Gln Lys Leu Ser Cys
      115      120      125
Val Ile Ser Ser Val Gly Ala Asn Glu Ile Trp Val Arg Lys Thr Ser
      130      135      140
Asp Ser Thr Lys Met Arg Ile Tyr Leu Gly Gln Leu Gln Arg Gly Leu
      145      150      155      160
Phe Val Ile Arg Arg Arg Ser Ala Ala
      165

```

&lt;210&gt; 3271

&lt;211&gt; 464

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3271

```

tcatgagcag ggccaattc tggcttctct gtggtcgcca tccatgtgct gggcgctcact
  60
gaaggcactg gggatacagc cgagcacaag atggacagag atccctggcc cctcggagca
  120
ggcagtctgt ggctctggcc cctccagttc cttgtcacca ggagataggc aatgcagctg
  180
atgagaaggg ccccgccagc aagagatcca atgatggtgg ccgccaggat cccagcgttg
  240
gtgggcaggt gtgtactggg cagctcctta ttcttttcag ctacctggac ctcagtcttg
  300
gccttcatag tccattcaga gttgatggta atggctactt ggtaggtgcc actgtctgta
  360
ggctgggcgc ggcgcagcag catggaacca ttggggaagc ccacgatgtc tcgctgtccc
  420
atggcactgc catccctctg aggccgttgt atccccaggg atgt
  464

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&lt;210&gt; 3272

&lt;211&gt; 140

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3272

```

Met Gly Gln Arg Asp Ile Val Gly Phe Pro Asn Gly Ser Met Leu Leu
  1      5      10      15
Arg Arg Ala Gln Pro Thr Asp Ser Gly Thr Tyr Gln Val Ala Ile Thr
      20      25      30
Ile Asn Ser Glu Trp Thr Met Lys Ala Lys Thr Glu Val Gln Val Ala
      35      40      45
Glu Lys Asn Lys Glu Leu Pro Ser Thr His Leu Pro Thr Asn Ala Gly

```

```

      50              55              60
Ile Leu Ala Ala Thr Ile Ile Gly Ser Leu Ala Ala Gly Ala Leu Leu
65              70              75              80
Ile Ser Cys Ile Ala Tyr Leu Leu Val Thr Arg Asn Trp Arg Gly Gln
      85              90              95
Ser His Arg Leu Pro Ala Pro Arg Gly Gln Gly Ser Leu Ser Ile Leu
      100             105             110
Cys Ser Ala Val Ser Pro Val Pro Ser Val Thr Pro Ser Thr Trp Met
      115             120             125
Ala Thr Thr Glu Lys Pro Glu Leu Gly Pro Ala His
      130             135             140

```

&lt;210&gt; 3273

&lt;211&gt; 387

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3273

```

ngcgcgccag ggatggaaaa ctttattctg tatgaggaga tcggaagagg aagcaagact
60
gttgtctata aagggcgacg gaagggaaca atcaattttg tagccattct ttgtactgat
120
aagtgcagaa ggcctgaaat aaccaactgg gtccgtctca cccgtgaaat aaaacacaag
180
aatattgtaa cttttcatga atggtatgaa acaagcaacc acctctggct agtgggtggaa
240
ctccgcacag gtggttcctt aaaaacagtt attgctcaag atgaaaacct cccagaagat
300
gttgtgagag aatttggaat tgacctgatt agtggattac atcatcttca taaacttggc
360
attctctttg tgacatttct cctagga
387

```

&lt;210&gt; 3274

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3274

```

Xaa Ala Pro Gly Met Glu Asn Phe Ile Leu Tyr Glu Glu Ile Gly Arg
1      5      10      15
Gly Ser Lys Thr Val Val Tyr Lys Gly Arg Arg Lys Gly Thr Ile Asn
      20      25      30
Phe Val Ala Ile Leu Cys Thr Asp Lys Cys Arg Arg Pro Glu Ile Thr
      35      40      45
Asn Trp Val Arg Leu Thr Arg Glu Ile Lys His Lys Asn Ile Val Thr
      50      55      60
Phe His Glu Trp Tyr Glu Thr Ser Asn His Leu Trp Leu Val Val Glu
65      70      75      80
Leu Arg Thr Gly Gly Ser Leu Lys Thr Val Ile Ala Gln Asp Glu Asn
      85      90      95
Leu Pro Glu Asp Val Val Arg Glu Phe Gly Ile Asp Leu Ile Ser Gly
      100     105     110
Leu His His Leu His Lys Leu Gly Ile Leu Phe Val Thr Phe Leu Leu

```

Gly

115 120 125

<210> 3275  
<211> 1266  
<212> DNA  
<213> Homo sapiens

<400> 3275  
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60  
agaacacatg aaaggaatac atggggaaga aataaagtag aaccaagag ttcttttaag  
120  
ttttctttta tagagacatg aataacagat aactgaagt ataaacaaaa attggcctga  
180  
agcgtccggt ggccggctta gttaggagct atggctaaac atcatcctga ttgatcttt  
240  
tgccgcaagc aggtctggtg tgccatcgga agactgtgtg aaaaatgtga tggcaagtgt  
300  
gtgatttgtg actcctatgt gcgtccctgc actctggtgc gcatatgtga tgagtgtaac  
360  
tatggatctt accaggggag ctgtgtgatc tgtggaggac ctgggggtctc tgatgcctat  
420  
tattgtaagg agtgcacat ccaggagaag gacagagatg gctgccccaa gattgtcaat  
480  
ctggggagct ctaagacaga cctcttctat gaacgcaaaa aatacggctt caagaagagg  
540  
tgattggtgg gtggccctt cctccccca acatcagtct gctgcagctg ccagaaaaca  
600  
tgcctactac taccagcaga aaggagcag agcccagagc atcaccagga gtgcctgcta  
660  
gtgtactggc agcttgccac cccctcctct cccttcaccc agacacgtgg tagggatgga  
720  
aaaggattct tcacagagca ctctggcaca ccatatcgga gaaaaattga tagattagtt  
780  
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900  
aagcgacgcc cagtgaaaaa catgatcttg cagcagctct ggtggcagct gtccttgagg  
960  
aacctttggt gtgtggtggg aagctatcag aacaagaaat gtaggcattt cccgtttttt  
1020  
ttgggggggg ggtggggggg cagggtcttg ccctcttgaa aggcatttac ttgtttaaca  
1080  
cttgtccagc tacagtgggg tacagtagct ggctattcac aggcattcac atagcccact  
1140  
agtctcatat tattttcctt ttgagaaatt ggaaactctt tctgttgcta ttatattaat  
1200  
aaagtgggtg tttattttct ggtaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
1260  
aaaaaa  
1266

```

<400> 3277
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ctgcgtggga ggcagaaaga gctaattgcg ccacgcttgt ccctcggcca ccgtcccacc
120
cagacttccg tctccttaaa atgttcattg gtaagtgcgt ggcagaagcg gctcaagcgc
180
actcgtgcgt cattgctgtc agggccgagg gagcggtgca aggccgccgc gtgacgtcag
240
gacgcgcgcg tcaggacgtc gaagccaaag aagaccagag ccagccgggt ggcacagcgg
300
tgtcgtggcc gtgttgctga tcgcctgggt ggttgttggc gtgtccctgc agcgaaggat
360
cctgggttggc agtgaaaaag cagtctggct cccgagggtc accccttata cccaaggtc
420
cagatggcgg ccaacgtggg tgatcaacgt agcacagatt ggtcttctca gtacagcatg
480
gtggctgggg caggccgaga gaatggcatg gagacgccga tgcacgagaa cccggagtgg
540
gagaaggccc gtcaggccct ggccagcatc agcaagtcag gagctgccgg cggctctgcc
600
aagtccagca gcaatgggccc tgtggccagt gcaagtacgt gtcccaggca gaagcctcag
660
ctttgcagca gcagcagtac taccagtggg accagcagta caactatgcc tacccttaca
720
gtactacta tcccatgagc atgtaccaga gctatggctc cccttcccag tatgggatgg
780

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 840  
 gaaccagccc ccagtccccg gcatggatga gagcatgtcc taccaggctc cccctcagca  
 900  
 gctgccgtcg gctcagcccc ctcagccctc aaatccccc catggggctc acacgttgaa  
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 1020  
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 1080  
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 1140  
 agcgaccctt tgctgttacc acccagagct ttggctccaa cgcagagggc cagcacagt  
 1200  
 gttttggccc ccagcccaac cctgagaaag ttcagaacca cagcgggtcc tctgcccggg  
 1260  
 ggaacctgtc tgggaagccc gatgactggc cccaggacat gaaagagtat gtggagcgct  
 1320  
 gcttcaccgc ctgtgagtcg gaggaggaca aggaccgcac ggaaaagctg ctcaaggagg  
 1380  
 tgctgcaggc gcggtgcag gacggctcgg cctataccat tgactggagc cggga  
 1435

&lt;210&gt; 3278

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3278

Met	Ala	Ala	Asn	Val	Gly	Asp	Gln	Arg	Ser	Thr	Asp	Trp	Ser	Ser	Gln
1				5				10					15		
Tyr	Ser	Met	Val	Ala	Gly	Ala	Gly	Arg	Glu	Asn	Gly	Met	Glu	Thr	Pro
			20					25					30		
Met	His	Glu	Asn	Pro	Glu	Trp	Glu	Lys	Ala	Arg	Gln	Ala	Leu	Ala	Ser
		35					40					45			
Ile	Ser	Lys	Ser	Gly	Ala	Ala	Gly	Gly	Ser	Ala	Lys	Ser	Ser	Ser	Asn
	50					55					60				
Gly	Pro	Val	Ala	Ser	Ala	Ser	Thr	Cys	Pro	Arg	Gln	Lys	Pro	Gln	Leu
65					70					75				80	
Cys	Ser	Ser	Ser	Ser	Thr	Thr	Ser	Gly	Thr	Ser	Ser	Thr	Thr	Met	Pro
				85					90					95	
Thr	Pro	Thr	Ala	Thr	Thr	Ile	Pro								
					100										

&lt;210&gt; 3279

&lt;211&gt; 1130

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3279

nngcgcccc accgcgcgc atccatgttc gacaccacac cccactctgg ccggagcacg  
 60  
 ccaagcagct ccccatcgct ccggaaacgg ctgcagctcc tgccccaag ccggccccc  
 120

cctgagccag aaccaggcac catggtggag aagggatcag atagctcctc agagaagggc  
 180  
 ggggtgcctg ggacccccag caccagagc ctaggcagcc ggaacttcac ccgcaacagc  
 240  
 aagaagatgc agagctggta cagtatgctg agccccactt ataagcagcg taatgaggac  
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 360  
 gccctgcagc gtgagatcct gctccagggc cgcctctacc tctctgagaa ctggatctgc  
 420  
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 780  
 gacatcacct cctcgggggc agctgaccgc agccaggagc caagcccagt gggttcgcgc  
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 gaggacaagg aggagcaggt agacagccag ccagacgcct cctccagcca gacagtgacc  
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<210> 3280

<211> 376

<212> PRT

<213> Homo sapiens

<400> 3280

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Gly	Arg	Ser	Thr	Pro	Ser	Ser	Ser	Pro	Ser	Leu	Arg	Lys	Arg	Leu	Gln
		20						25					30		
Leu	Leu	Pro	Pro	Ser	Arg	Pro	Pro	Glu	Pro	Glu	Pro	Gly	Thr	Met	
		35					40				45				
Val	Glu	Lys	Gly	Ser	Asp	Ser	Ser	Ser	Glu	Lys	Gly	Gly	Val	Pro	Gly
	50					55					60				
Thr	Pro	Ser	Thr	Gln	Ser	Leu	Gly	Ser	Arg	Asn	Phe	Ile	Arg	Asn	Ser
65				70					75					80	
Lys	Lys	Met	Gln	Ser	Trp	Tyr	Ser	Met	Leu	Ser	Pro	Thr	Tyr	Lys	Gln
			85						90					95	
Arg	Asn	Glu	Asp	Phe	Arg	Lys	Leu	Phe	Ser	Lys	Leu	Pro	Glu	Ala	Glu

100	105	110
Arg Leu Ile Val Asp Tyr Ser Cys Ala Leu Gln Arg Glu Ile Leu Leu		
115	120	125
Gln Gly Arg Leu Tyr Leu Ser Glu Asn Trp Ile Cys Phe Tyr Ser Asn		
130	135	140
Ile Phe Arg Trp Glu Thr Thr Ile Ser Ile Gln Leu Lys Glu Val Thr		
145	150	155
Cys Leu Lys Lys Glu Lys Thr Ala Lys Leu Ile Pro Asn Ala Ile Gln		
165	170	175
Ile Cys Thr Glu Ser Glu Lys His Phe Phe Thr Ser Phe Gly Ala Arg		
180	185	190
Asp Arg Cys Phe Leu Leu Ile Phe Arg Leu Trp Gln Asn Ala Leu Leu		
195	200	205
Glu Lys Thr Leu Ser Pro Arg Glu Leu Trp His Leu Val His Gln Cys		
210	215	220
Tyr Gly Ser Glu Leu Gly Leu Thr Ser Glu Asp Glu Asp Tyr Val Ser		
225	230	235
Pro Leu Gln Leu Asn Gly Leu Gly Thr Pro Lys Glu Val Gly Asp Val		
245	250	255
Ile Ala Leu Ser Asp Ile Thr Ser Ser Gly Ala Ala Asp Arg Ser Gln		
260	265	270
Glu Pro Ser Pro Val Gly Ser Arg Arg Gly His Val Thr Pro Asn Leu		
275	280	285
Ser Arg Ala Ser Ser Asp Ala Asp His Gly Ala Glu Glu Asp Lys Glu		
290	295	300
Glu Gln Val Asp Ser Gln Pro Asp Ala Ser Ser Ser Gln Thr Val Thr		
305	310	315
Pro Val Ala Glu Pro Pro Ser Thr Glu Pro Thr Gln Pro Asp Gly Pro		
325	330	335
Thr Thr Leu Gly Pro Leu Asp Leu Leu Pro Ser Glu Glu Leu Leu Thr		
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Asp Thr Ser Asn Ser Ser Ser Ser Thr Gly Glu Glu Ala Asp Leu Ala		
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Ala Leu Leu Pro Asp Leu Ser Gly		
370	375	

&lt;210&gt; 3281

&lt;211&gt; 842

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3281

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 360

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<210> 3282

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3282

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			20						25					30	
Pro	Trp	Pro	Arg	Gln	Pro	Gly	Gly	Cys	Trp	Thr	Val	Gly	Leu	Pro	Ala
			35					40					45		
Thr	Ser	Phe	Ala	Arg	Gly	Lys	Glu	His	His	Val	Gly	His	Ile	His	Glu
			50				55				60				
Gly	Thr	Gly	Asn	Ser	Val	Val	Pro	Ser	Val	Thr	Pro	Cys	Gln	Asp	Thr
65					70					75				80	
Gln	Asp	Glu	Asn	Pro	Ala	Pro	Glu	Arg	Ala	Ala	Gly	Ile	Ser	Ser	Thr
			85					90					95		
His	Thr	Gln	Ala	Leu	Cys	Pro	Gln	Ala	Pro	Pro	Ser	Val	Leu	Pro	Gly
			100					105					110		
Asn	Asn	Thr	Leu	Cys	Glu	Pro	Val	Val	Glu	Pro	Gly	Thr	Ala	Trp	Ala
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<210> 3283

<211> 3268

<212> DNA

<213> Homo sapiens

<400> 3283

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<210> 3284  
 <211> 1012  
 <212> PRT  
 <213> Homo sapiens

<400> 3284

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Ala Phe Thr Arg Xaa His Val Cys Ala Glu Asn Leu Pro Pro Val Leu
 35           40           45
Met Glu His Lys Ala Thr Thr Ile Gln Lys His Val Arg Gly Trp Met
 50           55           60
Ala Arg Arg His Phe Gln Arg Leu Arg Asp Ala Ala Ile Val Ile Gln
 65           70           75           80
Cys Ala Phe Arg Met Leu Lys Ala Arg Arg Glu Leu Lys Ala Leu Arg
 85           90           95
Ile Glu Ala Arg Ser Ala Glu His Leu Lys Arg Leu Asn Val Gly Met
 100          105          110
Glu Asn Lys Val Val Gln Leu Gln Arg Lys Ile Asp Glu Gln Asn Lys
 115          120          125
Glu Phe Lys Thr Leu Ser Glu Gln Leu Ser Val Thr Thr Ser Thr Tyr
 130          135          140
Thr Met Glu Val Glu Arg Leu Lys Lys Glu Leu Val His Tyr Gln Gln
 145          150          155          160
Ser Pro Gly Glu Asp Thr Ser Leu Arg Leu Gln Glu Glu Val Glu Ser
 165          170          175
Leu Arg Thr Glu Leu Gln Arg Ala His Ser Glu Arg Lys Ile Leu Glu
 180          185          190
Asp Ala His Ser Arg Glu Lys Asp Glu Leu Arg Lys Arg Val Ala Asp
 195          200          205
Leu Glu Gln Glu Asn Ala Leu Leu Lys Asp Glu Lys Glu Gln Leu Asn
 210          215          220
Asn Gln Ile Leu Cys Gln Ser Lys Asp Glu Phe Ala Gln Asn Ser Val
 225          230          235          240
Lys Glu Asn Leu Leu Met Lys Lys Glu Leu Glu Glu Glu Arg Ser Arg
 245          250          255
Tyr Gln Asn Leu Val Lys Glu Tyr Ser Gln Leu Glu Gln Arg Tyr Asp
 260          265          270
Asn Leu Arg Asp Glu Met Thr Ile Ile Lys Gln Thr Pro Gly His Arg
 275          280          285
Arg Asn Pro Ser Asn Gln Ser Ser Leu Glu Ser Asp Ser Asn Tyr Pro
 290          295          300
Ser Ile Ser Thr Ser Glu Ile Gly Asp Thr Glu Asp Ala Leu Gln Gln
 305          310          315          320
Val Glu Glu Ile Gly Leu Glu Lys Ala Ala Met Asp Met Thr Val Phe
 325          330          335
Leu Lys Leu Gln Lys Arg Val Arg Glu Leu Glu Gln Glu Arg Lys Lys
 340          345          350
Leu Gln Val Gln Leu Glu Lys Arg Glu Gln Gln Asp Ser Lys Lys Val
 355          360          365
Gln Ala Glu Pro Pro Gln Thr Asp Ile Asp Leu Asp Pro Asn Ala Asp

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370	375	380
Leu Ala Tyr Asn Ser	Leu Lys Arg Gln Glu Leu	Glu Ser Glu Asn Lys
385	390	395
Lys Leu Lys Asn Asp	Leu Asn Glu Leu Arg	Lys Ala Val Ala Asp Gln
405	410	415
Ala Thr Gln Asn Asn Ser	Ser His Gly Ser Pro	Asp Ser Tyr Ser Leu
420	425	430
Leu Leu Asn Gln Leu Lys	Leu Ala His Glu Glu Leu	Glu Val Arg Lys
435	440	445
Glu Glu Val Leu Ile Leu	Arg Thr Gln Ile Val Ser	Ala Asp Gln Arg
450	455	460
Arg Leu Ala Gly Arg Asn	Ala Glu Pro Asn Ile Asn	Ala Arg Ser Ser
465	470	475
Trp Pro Asn Ser Glu Arg	His Val Asp Gln Glu Asp	Ala Ile Glu Ala
485	490	495
Tyr His Gly Val Cys Gln	Thr Asn Arg Leu Leu Glu	Ala Gln Leu Gln
500	505	510
Ala Gln Ser Leu Glu His	Glu Glu Val Glu His Leu	Lys Ala Gln
515	520	525
Leu Glu Ala Leu Lys Glu	Glu Met Asp Lys Gln Gln	Gln Thr Phe Cys
530	535	540
Gln Thr Leu Leu Leu Ser	Pro Glu Ala Gln Val Glu	Phe Gly Val Gln
545	550	555
Gln Glu Ile Ser Arg Leu	Thr Asn Glu Asn Leu Asp	Leu Lys Glu Leu
565	570	575
Val Glu Lys Leu Glu Lys	Asn Glu Arg Lys Leu Lys	Lys Gln Leu Lys
580	585	590
Ile Tyr Met Lys Lys Ala	Gln Asp Leu Glu Ala Ala	Gln Ala Leu Ala
595	600	605
Gln Ser Glu Arg Lys Arg	His Glu Leu Asn Arg Gln	Val Thr Val Gln
610	615	620
Arg Lys Glu Lys Asp Phe	Gln Gly Met Leu Glu Tyr	His Lys Glu Asp
625	630	635
Glu Ala Leu Leu Ile Arg	Asn Leu Val Thr Asp Leu	Lys Pro Gln Met
645	650	655
Leu Ser Gly Thr Val Pro	Cys Leu Pro Ala Tyr Ile	Leu Tyr Met Cys
660	665	670
Ile Arg His Ala Asp Tyr	Thr Asn Asp Asp Leu Lys	Val His Ser Leu
675	680	685
Leu Thr Ser Thr Ile Asn	Gly Ile Lys Lys Val Leu	Lys Lys His Asn
690	695	700
Asp Asp Phe Glu Met Thr	Ser Phe Trp Leu Ser Asn	Thr Cys Arg Leu
705	710	715
Leu His Cys Leu Lys Gln	Tyr Ser Gly Asp Glu Gly	Phe Met Thr Gln
725	730	735
Asn Thr Ala Lys Gln Asn	Glu His Cys Leu Lys Asn	Phe Asp Leu Thr
740	745	750
Glu Tyr Arg Gln Val Leu	Ser Asp Leu Ser Ile Gln	Ile Tyr Gln Gln
755	760	765
Leu Ile Lys Ile Ala Glu	Gly Val Leu Gln Pro Met	Ile Val Ser Ala
770	775	780
Met Leu Glu Asn Glu Ser	Ile Gln Gly Leu Ser Gly	Val Lys Pro Thr
785	790	795
Gly Tyr Arg Lys Arg Ser	Ser Ser Met Ala Asp Gly	Asp Asn Ser Tyr

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 820 825 830  
 Cys Asp Gln Gly Leu Asp Pro Glu Ile Ile Leu Gln Val Phe Lys Gln  
 835 840 845  
 Leu Phe Tyr Met Ile Asn Ala Val Thr Leu Asn Asn Leu Leu Leu Arg  
 850 855 860  
 Lys Asp Val Cys Ser Trp Ser Thr Gly Met Gln Leu Arg Tyr Asn Ile  
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 Ser Gln Leu Glu Glu Trp Leu Arg Gly Arg Asn Leu His Gln Ser Gly  
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 Thr Ser Leu Ser Thr Gln Gln Ile Val Lys Ile Leu Asn Leu Tyr Thr  
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 Pro Leu Asn Glu Phe Glu Glu Arg Val Thr Val Ala Phe Ile Arg Thr  
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 965 970 975  
 Asp Ala Lys His Met Phe Pro Val Leu Phe Pro Phe Asn Pro Ser Ser  
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 995 1000 1005  
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 1010

&lt;210&gt; 3285

&lt;211&gt; 1518

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3285

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&lt;210&gt; 3286

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3286

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		20						25					30		
Lys	Asn	Asn	Asp	Asn	Thr	Arg	Pro	Ala	Pro	Pro	Pro	Lys	Ser	Cys	Cys
		35					40					45			
Cys	Glu	Leu	Arg	Leu	Gln	Lys	Arg	Thr	His	Thr	Val	Ala	Asp	Lys	Thr
		50				55					60				
Gln	Ala	Arg	Arg	Met	Phe	Glu	Ser	Gln	Ser	Ala	Leu	Ser	Leu	Val	Pro
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Val	Thr	Ser	Tyr	Val	Gln	Leu	Pro	Gly	Pro	Ile	Pro	Tyr	Ser	Asp	Cys
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Arg	Leu	Arg	Thr	Glu	Asp	Ala	Pro	Leu	Leu	Ser	Leu	His	Phe	Asp	Leu
			100				105						110		
Leu	Phe	Pro	Leu	Lys	Thr	Arg	Arg	Pro	Ala	Phe	Pro	Lys	Thr	Ala	Trp

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 <213> Homo sapiens

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<210> 3288  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 3288  
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 1                      5                      10                      15  
 Leu Gly Arg Val Gly Ile Val Ser Pro Ala Pro Phe Pro Ala Pro Gln  
 20                      25                      30  
 Ser Cys Ser Phe Ser Phe Gly Leu Ser Lys Tyr Pro Gly Pro Pro Cys

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      35          40          45
Ile Pro Leu Pro Phe Ser Cys Gly Cys Gly Ala Ser Leu Asn Arg Ser
  50          55          60
Thr Phe Leu Phe Pro Ser Thr Arg Asp Arg Glu Ser Leu Lys Gly Ser
  65          70          75          80
Gly Ala Pro Ser Ala His Leu Asp Gly Ala Gly Asp Ala Gln Arg Arg
      85          90          95
Phe Arg Ala Leu Tyr Phe Gln Leu Gln His Ser Gln Val Phe Thr Ala
      100          105          110
Gln Gly Asp Gly Ala Arg Val Thr Arg Asn Pro Gly Glu Gly Arg Ser
      115          120          125
Phe Pro Arg Arg Gly Ala Thr Ser Phe Pro Asp Trp Ala Tyr Ala Gly
      130          135          140
Gly Arg Gln Leu
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<210> 3289  
 <211> 554  
 <212> DNA  
 <213> Homo sapiens

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<400> 3289
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<210> 3290  
 <211> 129  
 <212> PRT  
 <213> Homo sapiens

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<400> 3290
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Pro Cys Lys Ala Arg Leu Leu Leu Pro Lys Gly Trp Gly Asp Val Leu
      20          25          30
Gly Ser Leu Thr Gln Cys Arg Arg Ala Trp Val Pro Pro Trp Thr Gln

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      35          40          45
Ser Leu Pro Leu Gly Ala Ser Val Ser Ser Ser Val Asp Trp Val Ala
      50          55          60
Cys Ala Ala Arg Arg Gly Cys Leu Val Ser Gly Arg Trp Ser Thr His
      65          70          75          80
His Arg Val Glu Ser Lys Ala Ser Pro Leu Ser Pro Ser Leu Pro Trp
      85          90          95
Thr Ser Pro Leu Pro Ala Thr Leu Ala Gly Leu Cys Glu Trp Glu Gly
      100          105          110
Arg Pro Ala Leu Ala Gly Ser Ser Pro Val Pro Pro Ala Leu Ile Leu
      115          120          125
Gly

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&lt;210&gt; 3291

&lt;211&gt; 1075

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3291

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<210> 3292

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3292

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20 25 30  
Trp Ser Ala Thr Pro Gly Pro Pro Trp Ala Pro Ser Pro Ala Thr Pro  
35 40 45  
Ala Val Arg Leu Pro Ala Pro Ser Pro Thr Ile Ala Ala Ser Val Pro  
50 55 60  
Pro His Trp Leu Phe Thr Trp Leu Ala Val Ser Val Ser Gln Pro Gly  
65 70 75 80  
Ser Glu Ser Xaa Arg Arg Pro Leu Pro Pro Gln Leu Pro Pro Pro  
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Thr Pro Pro Ser Leu Pro  
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<210> 3293

<211> 2362

<212> DNA

<213> Homo sapiens

<400> 3293

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<210> 3294

<211> 353

<212> PRT

<213> Homo sapiens

<400> 3294

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			20					25					30		
Thr	Ser	Leu	Pro	Pro	Gly	Pro	Pro	Ala	Gly	Arg	Arg	His	Leu	Pro	Leu
		35				40						45			
Ser	Arg	Arg	Arg	Arg	Glu	Met	Ser	Ser	Asn	Lys	Glu	Gln	Arg	Ser	Ala
		50				55					60				
Val	Phe	Val	Ile	Leu	Phe	Ala	Leu	Ile	Thr	Ile	Leu	Ile	Leu	Tyr	Ser
65					70				75					80	
Ser	Asn	Ser	Ala	Asn	Glu	Val	Phe	His	Tyr	Gly	Ser	Leu	Arg	Gly	Arg
			85						90					95	
Ser	Arg	Arg	Pro	Val	Asn	Leu	Lys	Lys	Trp	Ser	Ile	Thr	Asp	Gly	Tyr
			100					105					110		
Val	Pro	Ile	Leu	Gly	Asn	Lys	Thr	Leu	Pro	Ser	Arg	Cys	His	Gln	Cys
		115				120						125			
Val	Ile	Val	Ser	Ser	Ser	Ser	His	Leu	Leu	Gly	Thr	Lys	Leu	Gly	Pro
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Glu	Ile	Glu	Arg	Ala	Glu	Cys	Thr	Ile	Arg	Met	Asn	Asp	Ala	Pro	Thr
145					150				155					160	
Thr	Gly	Tyr	Ser	Ala	Asp	Val	Gly	Asn	Lys	Thr	Thr	Tyr	Arg	Val	Val
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Ala	His	Ser	Ser	Val	Phe	Arg	Val	Leu	Arg	Arg	Pro	Gln	Glu	Phe	Val
			180					185					190		
Asn	Arg	Thr	Pro	Glu	Thr	Val	Phe	Ile	Phe	Trp	Gly	Pro	Pro	Ser	Lys
		195				200						205			
Met	Gln	Lys	Pro	Gln	Gly	Ser	Leu	Val	Arg	Val	Ile	Gln	Arg	Ala	Gly
		210				215					220				
Leu	Val	Phe	Pro	Asn	Met	Glu	Ala	Tyr	Ala	Val	Ser	Pro	Gly	Arg	Met
225					230				235					240	
Arg	Gln	Phe	Asp	Asp	Leu	Phe	Arg	Gly	Glu	Thr	Gly	Lys	Asp	Arg	Glu
				245					250					255	
Lys	Ser	His	Ser	Trp	Leu	Ser	Thr	Gly	Trp	Phe	Thr	Met	Val	Ile	Ala
			260					265					270		
Val	Glu	Leu	Cys	Asp	His	Val	His	Val	Tyr	Gly	Met	Val	Pro	Pro	Asn
		275					280					285			
Tyr	Cys	Ser	Gln	Arg	Pro	Arg	Leu	Gln	Arg	Met	Pro	Tyr	His	Tyr	Tyr
		290				295					300				
Glu	Pro	Lys	Gly	Pro	Asp	Glu	Cys	Val	Thr	Tyr	Ile	Gln	Asn	Glu	His
305					310					315				320	
Ser	Arg	Lys	Gly	Asn	His	His	Arg	Phe	Ile	Thr	Glu	Lys	Arg	Val	Phe
				325					330					335	
Ser	Ser	Trp	Ala	Gln	Leu	Tyr	Gly	Ile	Thr	Phe	Ser	His	Pro	Ser	Trp
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Thr															

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 <211> 690  
 <212> DNA  
 <213> Homo sapiens

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 180  
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<210> 3296  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 3296  
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 Pro Arg His Met Gly Pro Ala Leu Arg Ser Leu Gln Val Lys Lys Gly  
 35 40 45  
 Thr Glu His Ala Asp Pro Leu Pro Phe Pro Ser Val Ser Leu Ser Gly  
 50 55 60  
 Phe Thr Val Gly Thr Leu Ser Glu Thr Ser Thr Gly Gly Pro Ala Thr  
 65 70 75 80  
 Pro Thr Trp Lys Glu Cys Pro Ile Cys Lys Glu Arg Phe Pro Ala Glu  
 85 90 95  
 Ser Asp Lys Asp Ala Leu Glu Asp His Met Asp Gly His Phe Phe Phe  
 100 105 110  
 Ser Thr Gln Gly Pro Leu His Leu

115

120

&lt;210&gt; 3297

&lt;211&gt; 3176

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3297

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<210> 3298

<211> 251

<212> PRT

<213> Homo sapiens

<400> 3298

Gly	His	Leu	Cys	Val	Cys	Leu	Cys	Val	Cys	Met	Tyr	Leu	Cys	Val	Cys
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Val	Cys	Leu	Cys	Val	Cys	Ala	Leu	Cys	Leu	Cys	Val	Cys	Leu	Cys	Glu
			20					25					30		
Cys	Leu	Trp	Val	Ser	Phe	Cys	Val	Cys	Val	Cys	Ile	Cys	Val	Cys	Val
		35					40					45			
Xaa	Leu	Cys	Ala	Cys	Met	Cys	Leu	Asp	Val	Cys	Phe	Cys	Met	Cys	Leu
	50					55					60				
Cys	Val	Cys	Leu	Tyr	Val	Cys	Ile	Cys	Val	Tyr	Val	Cys	Val	Cys	His
65					70					75					80
Phe	Val	Cys	Phe	Trp	Val	Cys	Leu	Ser	Ala	Cys	Leu	Cys	Ile	Pro	Val
				85					90					95	
Ser	Pro	Cys	Val	Cys	Leu	Cys	Val	Cys	Ile	Cys	Xaa	Cys	Leu	Cys	Met
			100					105					110		
Cys	Val	Arg	Gly	Cys	Val	Ser	Val	Cys	Val	Cys	Val	Cys	Ile	Glu	Arg
			115					120					125		
Glu	Gly	Glu	Arg	Lys	Gly	Ala	Thr	Asp	Gly	Ser	Ala	Trp	Lys	Val	Tyr
	130					135					140				
Pro	His	Ser	Gln	Pro	Trp	Glu	Glu	Ser	Val	Asn	Pro	Pro	Thr	Gly	Gln
145					150					155					160
Asp	Gln	Leu	Trp	Trp	Cys	Leu	Ala	Asp	Ser	Gly	Asn	Val	Thr	Phe	His
				165					170					175	
Leu	Arg	Met	Gly	Leu	His	Phe	Leu	Gly	Lys	Glu	Cys	Arg	Ser	Trp	Ser
			180					185					190		
Leu	Lys	Glu	Cys	Phe	Phe	Phe	Pro	Phe	Val	Ile	Glu	Arg	Ala	Gln	Pro
		195					200					205			
Cys	Val	His	Trp	Leu	Thr	Val	Thr	Asn	Leu	Arg	Val	Gly	Asp	Ser	His
	210					215					220				
Arg	Glu	Glu	Thr	Glu	Gly	Thr	Ala	Asp	Ser	Glu	Gln	Glu	Ser	Gly	Gly
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Thr	Ser	Leu	Pro	Leu	Gly	Pro	Asn	Pro	Gln	Leu					
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<210> 3299

<211> 1387

<212> DNA

<213> Homo sapiens

<400> 3299

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240  
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300  
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480  
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1080  
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&lt;210&gt; 3300

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3300

Met Ser Arg Cys Glu Thr Cys Gly Thr Glu Glu Ala Lys Tyr Arg Cys

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20           25           30
Lys Ala Glu Leu Thr Cys Asn Gly Val Arg Asp Lys Thr Ala Tyr Ile
35           40           45
Ser Ile Gln Gln Phe Thr Glu Met Asn Leu Leu Ser Asp Tyr Arg Phe
50           55           60
Leu Glu Asp Val Ala Arg Thr Ala Asp His Ile Ser Arg Asp Ala Phe
65           70           75           80
Leu Lys Arg Pro Ile Ser Asn Lys Tyr Met Tyr Phe Met Lys Asn Arg
85           90           95
Ala Arg Ser Lys Gly Ile Asn Leu Lys Leu Leu Pro Asn Gly Phe Thr
100          105          110
Lys Arg Lys Glu Asn Ser Thr Phe Phe Asp Lys Lys Lys Gln Gln Phe
115          120          125
Cys Trp His Val Lys Leu Gln Phe Pro Gln Ser Gln Ala Glu Tyr Ile
130          135          140
Glu Lys Arg Val Pro Asp Asp Lys Thr Ile Asn Glu Ile Leu Lys Pro
145          150          155          160
Tyr Ile Asp Pro Glu Lys Ser Asp Pro Val Ile Arg Gln Arg Leu Lys
165          170          175
Ala Tyr Ile Arg Ser Gln Thr Gly Val Gln Ile Leu Met Lys Ile Glu
180          185          190
Tyr Met Gln Gln Asn Leu Val Arg Tyr Tyr Glu Leu Asp Pro Tyr Lys
195          200          205
Ser Leu Leu Asp Asn Leu Arg Asn Lys Val Ile
210          215

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&lt;210&gt; 3301

&lt;211&gt; 2109

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3301

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600

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720  
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780  
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2109

&lt;210&gt; 3302

<211> 323  
 <212> PRT  
 <213> Homo sapiens

<400> 3302  
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 20 25 30  
 Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser  
 35 40 45  
 Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala  
 50 55 60  
 Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg  
 65 70 75 80  
 Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val  
 85 90 95  
 Phe Glu Asp Phe Val Ser Asp Glu Leu Arg Asn Lys Ala Thr Gln Pro  
 100 105 110  
 Met Lys Val Lys Phe Thr His Gly Gly Thr Gly Ser Ser Gln Thr Ala  
 115 120 125  
 Pro Thr Cys Gly Arg Glu Ser Ser Pro Arg Glu Thr Lys Leu Arg Met  
 130 135 140  
 Ala Ser Met Glu Ser Pro Xaa Val Asn Ala Phe Pro Ala Gln Asn Asn  
 145 150 155 160  
 Tyr Gly Leu Tyr Asp Leu Leu Gly Asn Val Trp Glu Trp Thr Ala Ser  
 165 170 175  
 Pro Tyr Gln Ala Ala Glu Gln Asp Met Arg Val Leu Arg Gly His Pro  
 180 185 190  
 Gly Ser Thr Gln Leu Met Ala Leu Pro Ile Thr Gly Pro Gly Ser Pro  
 195 200 205  
 Pro Gly Trp Ala Thr Leu Gln Ile Gln Pro Gln Thr Thr Ser Val Ser  
 210 215 220  
 Ala Val Leu Gln Thr Gln Ala Gly Arg Gln Gly Ser Cys Lys Gln Pro  
 225 230 235 240  
 Gly Gly Asp Lys Glu Lys Ser Leu Leu Gly Ser Leu Ser Phe Pro Gly  
 245 250 255  
 His Val Ala Asn Ser Ala Ile Pro Ser Ser Arg Ala Ser Ala Ser Gly  
 260 265 270  
 Lys Asn Phe Pro Phe Pro Val Ser His Pro Ser Val Ala Gly Ala Ser  
 275 280 285  
 His Gln Gly Arg Arg Gly Leu Ser Leu Leu Cys Phe Gly Glu Gly Ala  
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 305 310 315 320  
 Lys Tyr Tyr

<210> 3303  
 <211> 699  
 <212> DNA  
 <213> Homo sapiens

<400> 3303

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 240  
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 360  
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 420  
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 660  
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 699

&lt;210&gt; 3304

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3304

Pro Arg Lys Arg Asp Phe Thr Asn Glu Ala Pro Pro Ala Pro Leu Pro  
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 Asp Ala Ser Ala Ser Pro Leu Ser Pro His Arg Arg Ala Lys Ser Leu  
 20 25 30  
 Asp Arg Arg Ser Thr Glu Pro Ser Val Thr Pro Asp Leu Leu Asn Phe  
 35 40 45  
 Lys Lys Gly Trp Leu Thr Lys Gln Tyr Glu Asp Gly Gln Trp Lys Lys  
 50 55 60  
 His Trp Phe Val Leu Ala Asp Gln Ser Leu Arg Tyr Tyr Arg Asp Ser  
 65 70 75 80  
 Val Ala Glu Glu Ala Ala Asp Leu Asp Gly Glu Ile Asp Leu Ser Ala  
 85 90 95  
 Cys Tyr Asp Val Thr Glu Tyr Pro Val Gln Arg Asn Tyr Gly Phe Gln  
 100 105 110  
 Ile His Thr Lys Glu Gly Glu Phe Thr Leu Ser Ala Met Thr Ser Gly  
 115 120 125  
 Ile Arg Arg Asn Trp Ile Gln Thr Ile Met Lys His Val His Pro Thr  
 130 135 140  
 Thr Ala Pro Asp Val Thr Ser Ser Leu Pro Glu Glu Lys Asn Lys Ser  
 145 150 155 160  
 Ser Cys Ser Phe Glu Thr Cys Pro Arg Ser Thr Glu Lys Gln Glu Ala  
 165 170 175  
 Glu Leu Gly Glu Pro Asp Pro Glu Gln Lys Arg Ser Arg Ala Arg Glu

	180		185		190
Arg	Arg	Arg	Glu	Gly	Arg
			Ser	Lys	Thr
			Phe	Asp	Trp
			Ala	Glu	Phe
			Arg		
	195		200		205
Pro	Ile	Gln	Gln	Ala	Leu
			Ala	Gln	Glu
			Arg	Val	Gly
			Gly	Gly	Val
			Gly	Pro	
	210		215		220
Ala	Asp	Thr	His	Glu	Pro
			Leu	Arg	Pro
	225		230		

&lt;210&gt; 3305

&lt;211&gt; 2717

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3305

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1200

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2700  
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2717

&lt;210&gt; 3306

&lt;211&gt; 319

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3306

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      20           25           30
Ile Ser Leu Val Met Lys Thr Pro Arg Val Ala Lys Asn Glu Ala Leu
      35           40           45
Trp His Pro Thr Leu Asn Leu Pro Leu Ser Pro Gln Gly Thr Val Arg
      50           55           60
Thr Ala Val Glu Phe Gln Val Met Thr Gln Thr Gln Ser Leu Ser Phe
      65           70           75           80
Leu Leu Gly Ser Ser Ala Ser Leu Asp Cys Gly Phe Ser Met Ala Pro
      85           90           95
Gly Leu Asp Leu Ile Ser Val Glu Trp Arg Leu Gln His Lys Gly Arg
      100          105          110
Gly Gln Leu Val Tyr Ser Trp Thr Ala Gly Gln Gly Gln Ala Val Arg
      115          120          125
Lys Gly Ala Thr Leu Xaa Ala Cys Thr Thr Gly His Gly Xaa Arg Asp
      130          135          140
Ala Ser Leu Thr Leu Pro Gly Leu Thr Ile Gln Asp Glu Gly Thr Tyr
      145          150          155          160
Ile Cys Gln Ile Thr Thr Ser Leu Tyr Arg Ala Gln Gln Ile Ile Gln
      165          170          175
Leu Asn Ile Gln Ala Ser Pro Lys Val Arg Leu Ser Leu Ala Asn Glu
      180          185          190
Ala Leu Leu Pro Thr Leu Ile Cys Asp Ile Ala Gly Tyr Tyr Pro Leu
      195          200          205
Asp Val Val Val Thr Trp Thr Arg Glu Glu Leu Gly Gly Ser Pro Ala
      210          215          220
Gln Val Ser Gly Ala Ser Phe Ser Ser Leu Arg Gln Ser Val Ala Gly
      225          230          235          240
Thr Tyr Ser Ile Ser Ser Ser Leu Thr Ala Glu Pro Gly Leu Cys Arg
      245          250          255
Cys His Leu His Leu Pro Gly His Thr His Leu Ser Gly Gly Ala Pro
      260          265          270
Trp Gly Gln His Pro Gly Cys Pro Thr Arg Ala Glu Asn Ser Leu Gly
      275          280          285
Ser His Leu Cys Gln Gln Ser Leu Pro Ser Cys Thr Asp Val Pro Gly
      290          295          300
Ala Ser Glu Thr Ala Ser Thr Tyr Arg Thr Trp Ala Ala Ser Gly
      305          310          315

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&lt;210&gt; 3307

&lt;211&gt; 352

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3307

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 352

<210> 3308

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3308

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 Pro Arg Trp Glu Pro Cys Leu Gly Gln Gly Gly Arg Val Asp Gly Ser  
 35 40 45  
 Trp Asp Cys Asp Ile Gly Arg Arg Gly Arg Ser Pro Ala Leu Ser Ser  
 50 55 60  
 Ala Gly Trp Ala Gly Ile His Leu Ala Ala Ser Gln Gly Leu Cys Pro  
 65 70 75 80  
 Ala Gly Trp Ser Leu Cys Cys Pro Asn Gln Val Ser Thr Phe Pro Ala  
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 Pro Met Arg Arg Glu Gly Gly Arg Trp Trp Leu Gly Trp Arg  
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<210> 3309

<211> 737

<212> DNA

<213> Homo sapiens

<400> 3309

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 240  
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 360  
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 420  
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 540  
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 737

<210> 3310

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3310

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Arg	Gly	Arg	Glu	Ile	Arg	Lys	Glu	Leu	Val	His	Leu	Tyr	Pro	Arg	Glu
	20						25						30		
Ala	Gln	Leu	Glu	Glu	Gln	Phe	Tyr	Leu	Gln	Ala	Leu	Lys	Leu	Pro	Asn
	35					40					45				
Gln	Thr	His	Pro	Asp	Val	Pro	Val	Gly	Asp	Glu	Ser	Gln	Ala	Arg	Val
	50				55					60					
Leu	His	Met	Val	Gly	Asp	Lys	Pro	Val	Phe	Ser	Phe	Gln	Pro	Arg	Gly
65				70					75					80	
His	Leu	Glu	Ile	Gly	Glu	Lys	Leu	Asp	Ile	Ile	Arg	Gln	Lys	Arg	Leu
			85					90					95		
Ser	His	Val	Ser	Gly	His	Arg	Ser	Tyr	Tyr	Leu	Arg	Gly	Ala	Gly	Ala
		100					105					110			
Leu	Leu	Gln	His	Gly	Leu	Val	Asn	Phe	Thr	Phe	Asn	Lys	Leu	Leu	Arg
	115					120					125				
Arg	Gly	Phe	Thr	Pro	Met	Thr	Val	Pro	Asp	Leu	Leu	Arg	Gly	Ala	Val
	130				135					140					
Phe	Glu	Gly	Cys	Gly	Met	Thr	Pro	Asn	Ala	Asn	Pro	Ser	Gln	Ile	Tyr
145				150					155					160	
Asn	Ile	Asp	Pro	Ala	Arg	Phe	Lys	Asp	Leu	Asn	Leu	Ala	Gly	Thr	Ala
			165					170					175		
Glu	Val	Gly	Leu	Ala	Gly	Tyr	Phe	Met	Asp	His	Thr	Val	Ala	Phe	Arg
		180				185						190			
Asp	Leu	Pro	Val	Arg	Met	Val	Cys	Ser	Ser	Thr	Cys	Tyr	Arg	Ala	Glu
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Thr	Asn														
	210														

<210> 3311

<211> 486

<212> DNA

<213> Homo sapiens

<400> 3311

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 180  
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 240  
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 300  
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 360  
 ttctggaagg ttggactcat ctcaggtaca gtttttgtga tcctcggatt gactgttctg  
 420  
 gcagtgggct ttcttgtgcc ccccaaaatc gaagcatttg gcgaagccga ttttgtggtg  
 480  
 gtcgac  
 486

&lt;210&gt; 3312

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3312

Met Ser Ser Cys Ser Asn Val Cys Gly Ser Arg Gln Ala Gln Ala Ala  
 1 5 10 15  
 Ala Glu Gly Gly Tyr Gln Arg Tyr Gly Val Arg Ser Tyr Leu His Gln  
 20 25 30  
 Phe Tyr Glu Asp Cys Thr Ala Ser Ile Trp Glu Tyr Glu Asp Asp Phe  
 35 40 45  
 Gln Ile Gln Arg Ser Pro Asn Arg Trp Ser Ser Val Phe Trp Lys Val  
 50 55 60  
 Gly Leu Ile Ser Gly Thr Val Phe Val Ile Leu Gly Leu Thr Val Leu  
 65 70 75 80  
 Ala Val Gly Phe Leu Val Pro Pro Lys Ile Glu Ala Phe Gly Glu Ala  
 85 90 95  
 Asp Phe Val Val Val Asp  
 100

&lt;210&gt; 3313

&lt;211&gt; 1791

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3313

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 300

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420  
aactattcta caagcaaaag gatcactcgg ccaggaaata ctgatgatcc atcaggaggc  
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960  
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1791

&lt;210&gt; 3314

&lt;211&gt; 537

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3314

Xaa Leu Gly Arg Arg Thr Arg Arg Thr Gly Ser Thr Arg Ala Arg Pro  
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 Ser Val Ser Arg Pro Arg Arg Gly Arg Ser Thr Thr Arg Pro Arg Lys  
 20 25 30  
 Ala Arg Thr Ala Val Lys Arg Arg Pro Gly Ala Gly Arg Val Gly Gly  
 35 40 45  
 Gly Gly Gly Arg Xaa Arg Ser Arg Gln Pro Glu Gly Leu Arg Ser His  
 50 55 60  
 His Lys Val Ser Val Ser Pro Val Val His Val Arg Gly Leu Cys Glu  
 65 70 75 80  
 Ser Val Val Glu Ala Asp Leu Val Glu Ala Leu Glu Lys Phe Gly Thr  
 85 90 95  
 Ile Cys Tyr Val Met Met Met Pro Phe Lys Arg Gln Ala Leu Val Glu  
 100 105 110  
 Phe Glu Asn Ile Asp Ser Ala Lys Glu Cys Val Thr Phe Ala Ala Asp  
 115 120 125  
 Glu Pro Val Tyr Ile Ala Gly Gln Gln Ala Phe Phe Asn Tyr Ser Thr  
 130 135 140  
 Ser Lys Arg Ile Thr Arg Pro Gly Asn Thr Asp Asp Pro Ser Gly Gly  
 145 150 155 160  
 Asn Lys Val Leu Leu Leu Ser Ile Gln Asn Pro Leu Tyr Pro Ile Thr  
 165 170 175  
 Val Asp Val Leu Tyr Thr Val Cys Asn Pro Val Gly Lys Val Gln Arg  
 180 185 190  
 Ile Val Ile Phe Lys Arg Asn Gly Ile Gln Ala Met Val Glu Phe Glu  
 195 200 205  
 Ser Val Leu Cys Ala Gln Lys Ala Lys Ala Ala Leu Asn Gly Ala Asp  
 210 215 220  
 Ile Tyr Ala Gly Cys Cys Thr Leu Lys Ile Glu Tyr Ala Arg Pro Thr  
 225 230 235 240  
 Arg Leu Asn Val Ile Arg Asn Asp Asn Asp Ser Trp Asp Tyr Thr Lys  
 245 250 255  
 Pro Tyr Leu Gly Arg Arg Asp Arg Gly Lys Gly Arg Gln Arg Gln Ala  
 260 265 270  
 Ile Leu Gly Glu His Pro Ser Ser Phe Arg His Asp Gly Tyr Gly Ser  
 275 280 285  
 His Gly Pro Leu Leu Pro Leu Pro Ser Arg Tyr Arg Met Gly Ser Arg  
 290 295 300  
 Asp Thr Pro Glu Leu Val Ala Tyr Pro Leu Pro Gln Ala Ser Ser Ser  
 305 310 315 320  
 Tyr Met His Gly Gly Asn Pro Ser Gly Ser Val Val Met Val Ser Gly  
 325 330 335  
 Leu His Gln Leu Lys Met Asn Cys Ser Arg Val Phe Asn Leu Phe Cys  
 340 345 350  
 Leu Tyr Gly Asn Ile Glu Lys Val Lys Phe Met Lys Thr Ile Pro Gly  
 355 360 365  
 Thr Ala Leu Val Glu Met Gly Asp Glu Tyr Ala Val Glu Arg Ala Val  
 370 375 380  
 Thr His Leu Asn Asn Val Lys Leu Phe Gly Lys Arg Leu Asn Val Cys  
 385 390 395 400  
 Val Ser Lys Gln His Ser Val Val Pro Ser Gln Ile Phe Glu Leu Glu

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                405                410                415
Asp Gly Thr Ser Ser Tyr Lys Asp Phe Ala Met Ser Lys Asn Asn Arg
                420                425                430
Phe Thr Ser Ala Gly Gln Ala Ser Lys Asn Ile Ile Gln Pro Pro Ser
                435                440                445
Cys Val Leu His Tyr Tyr Asn Val Pro Leu Cys Val Thr Glu Glu Thr
                450                455                460
Phe Thr Lys Leu Cys Asn Asp His Glu Val Leu Thr Phe Ile Lys Tyr
465                470                475                480
Lys Val Phe Asp Ala Lys Pro Ser Ala Lys Thr Leu Ser Gly Leu Leu
                485                490                495
Glu Trp Glu Cys Lys Thr Asp Ala Val Glu Ala Leu Thr Ala Leu Asn
                500                505                510
His Tyr Gln Ile Arg Val Pro Asn Gly Ser Asn Pro Tyr Thr Leu Lys
                515                520                525
Leu Cys Phe Ser Thr Ser Ser His Leu
                530                535

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&lt;210&gt; 3315

&lt;211&gt; 934

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3315

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gcagccacag catcctgaga ccttcggggc ccggagcagc ctccctttgg tctgcttctc
120
gaagggttcaa ttcacagagc acttcatatc taccagggtg atatcaaat atatgttctt
180
aaaacatccc tgagttcacc accttgGCCa gaagttgttc tgccagacc agttgaggag
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accagacacc atgcagaggt cgtgaagaag gtgaatgaga tgatcgtcac ggggcagtat
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600
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660
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720
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780
ccccgagcca gagaaaacag gaactggggg agaatgacaa gcatggccct cccagggtg
840
gataaatagt attcttgga gccctccacc ccatgtggcg gcggcagggc ccaggggagt
900

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934

<210> 3316  
<211> 187  
<212> PRT  
<213> Homo sapiens

<400> 3316  
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20 25 30  
Val Pro Lys Thr Ser Leu Ser Ser Pro Pro Trp Pro Glu Val Val Leu  
35 40 45  
Pro Asp Pro Val Glu Glu Thr Arg His His Ala Glu Val Val Lys Lys  
50 55 60  
Val Asn Glu Met Ile Val Thr Gly Gln Tyr Gly Arg Leu Phe Ala Val  
65 70 75 80  
Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser Glu Asp Leu Ile  
85 90 95  
Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu Arg Ile Arg Leu  
100 105 110  
Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr Leu Leu Gly Lys  
115 120 125  
Pro Leu Leu Gly Lys Asp Leu Val Arg Val Glu Ala Thr Val Ile Glu  
130 135 140  
Lys Thr Glu Ser Trp Pro Arg Ile Ile Met Arg Phe Arg Lys Arg Lys  
145 150 155 160  
Asn Phe Lys Lys Lys Arg Ile Val Thr Thr Pro Gln Thr Val Leu Arg  
165 170 175  
Ile Asn Ser Ile Glu Ile Ala Pro Cys Leu Leu  
180 185

<210> 3317  
<211> 1665  
<212> DNA  
<213> Homo sapiens

<400> 3317  
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120  
aaaagaagct gagaaaaaa gatgccaaga ctggaagcat cgaagatggt gagcccttcc  
180  
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240  
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300  
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360  
ctgggggaga tggaggcgaa gacaagagag ctcattgcta gaagaaccac acctcttttg  
420

gaatatatta aaaatagaaa attagaaaag cagagaattc gagaagagaa gcgagaagaa  
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 540  
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 720  
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 780  
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 840  
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 900  
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 1020  
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 1200  
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 1260  
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 1320  
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 1380  
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 1440  
 ctcacaaaca cctgtaagtt agatctgcac ggacgggtgag cacaggactg tggttacccc  
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 1560  
 ccagcgagc actacagatg gcacacactt tctgacagca ccaggcccca ccctggcctc  
 1620  
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 1665

&lt;210&gt; 3318

&lt;211&gt; 253

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3318

Met	Glu	Ala	Lys	Thr	Arg	Glu	Leu	Ile	Ala	Arg	Arg	Thr	Thr	Pro	Leu
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Leu	Glu	Tyr	Ile	Lys	Asn	Arg	Lys	Leu	Glu	Lys	Gln	Arg	Ile	Arg	Glu
			20					25					30		
Glu	Lys	Arg	Glu	Glu	Arg	Arg	Arg	Arg	Glu	Leu	Glu	Lys	Lys	Arg	Leu

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  50      55      60
Lys Glu Thr Asp Lys Gln Lys Lys Ile Ala Glu Lys Glu Val Arg Ile
  65      70      75      80
Lys Leu Leu Lys Lys Pro Glu Lys Gly Glu Glu Pro Thr Thr Glu Lys
      85      90      95
Pro Lys Glu Arg Gly Glu Glu Ile Asp Thr Gly Gly Gly Lys Gln Glu
      100      105      110
Ser Cys Ala Pro Gly Ala Val Val Lys Ala Arg Pro Met Glu Gly Ser
      115      120      125
Leu Glu Glu Pro Gln Glu Thr Ser His Ser Gly Ser Asp Lys Glu His
      130      135      140
Arg Asp Val Glu Arg Ser Gln Glu Gln Glu Ser Glu Ala Gln Arg Tyr
      145      150      155      160
His Val Asp Asp Gly Arg Arg His Arg Ala His His Glu Pro Glu Arg
      165      170      175
Leu Ser Arg Arg Ser Glu Asp Glu Gln Arg Trp Gly Lys Gly Pro Gly
      180      185      190
Gln Asp Arg Gly Lys Lys Gly Ser Gln Asp Ser Gly Ala Pro Gly Glu
      195      200      205
Ala Met Glu Arg Leu Gly Arg Ala Gln Arg Cys Asp Asp Ser Pro Ala
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&lt;210&gt; 3319

&lt;211&gt; 1541

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3319

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  600

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 720  
 gacctgcgct ccattcttga cgcacctgcc cctgcctacc atgacccccct ctacctggag  
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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a  
 1541

&lt;210&gt; 3320

&lt;211&gt; 256

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3320

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		20						25					30		
Glu	Tyr	Val	Arg	Trp	Met	Met	Tyr	Trp	Ile	Val	Phe	Ala	Leu	Phe	Met
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Ala	Ala	Glu	Ile	Val	Thr	Asp	Ile	Phe	Ile	Ser	Trp	Phe	Pro	Phe	Tyr
		50				55				60					
Tyr	Glu	Ile	Lys	Met	Ala	Phe	Val	Leu	Trp	Leu	Leu	Ser	Pro	Tyr	Thr
65				70				75				80			
Lys	Gly	Ala	Ser	Leu	Leu	Tyr	Arg	Lys	Phe	Val	His	Pro	Ser	Leu	Ser
			85					90				95			
Arg	His	Glu	Lys	Glu	Ile	Asp	Ala	Tyr	Ile	Val	Gln	Ala	Lys	Glu	Arg
			100					105				110			
Ser	Tyr	Glu	Thr	Val	Leu	Ser	Phe	Gly	Lys	Arg	Gly	Leu	Asn	Ile	Ala

	115		120		125
Ala	Ser	Ala	Ala	Thr	Lys
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Gly	Arg	Leu	Arg	Ser	Phe
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Ala	Pro	Ala	Pro	Ala	Tyr
			165		170
Ser	His	Arg	Arg	Pro	Pro
			180		185
Ser	Asp	Thr	Glu	Asp	Glu
			195		200
Ala	Pro	Ala	Arg	Pro	Arg
			210		215
Arg	Val	Val	Lys	Arg	Lys
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Leu	Lys	Val	Arg	Thr	Arg
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&lt;210&gt; 3321

&lt;211&gt; 1536

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3321

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&lt;210&gt; 3322

&lt;211&gt; 454

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3322

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			20					25					30		
Thr	Pro	Thr	Ser	Val	Ile	Gln	Val	Thr	Asn	Leu	Ser	Ser	Ala	Val	Thr
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Ser	Glu	Gln	Met	Arg	Thr	Leu	Phe	Ser	Phe	Leu	Gly	Glu	Ile	Glu	Glu
	50					55				60					
Leu	Arg	Leu	Tyr	Pro	Pro	Asp	Asn	Ala	Pro	Leu	Ala	Phe	Ser	Ser	Lys
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Val	Cys	Tyr	Val	Lys	Phe	Arg	Asp	Pro	Ser	Ser	Val	Gly	Val	Ala	Gln
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Cys	Ala	Glu	Gly	Lys	Ile	Pro	Glu	Glu	Ser	Lys	Ala	Leu	Ser	Leu	Leu
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Ala	Pro	Ala	Pro	Thr	Met	Thr	Ser	Leu	Met	Pro	Gly	Ala	Gly	Leu	Leu
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Ser	Leu	Gly	Ala	Ile	Pro	Ala	Ala	Ala	Leu	Asp	Pro	Asn	Ile	Ala	Thr
			165					170					175		
Leu	Gly	Glu	Ile	Pro	Gln	Pro	Pro	Leu	Met	Gly	Asn	Val	Asp	Pro	Ser
			180					185					190		
Lys	Ile	Asp	Glu	Ile	Arg	Arg	Thr	Val	Tyr	Val	Gly	Asn	Leu	Asn	Ser

195	200	205
Gln Thr Thr Thr Ala Asp	Gln Leu Leu Glu Phe	Phe Lys Gln Val Gly
210	215	220
Glu Val Lys Phe Ala Asp	Gly Arg Ile Asn His	Ser Asn Asn Ala Ile
225	230	235
Val Lys Pro Pro Glu Met	Thr Pro Gln Ala Ala	Ala Lys Glu Leu Glu
245	250	255
Glu Val Met Lys Arg Val	Arg Glu Ala Gln Ser	Phe Ile Ser Ala Ala
260	265	270
Ile Glu Pro Glu Ser Gly	Lys Ser Asn Glu Arg	Lys Gly Gly Arg Ser
275	280	285
Arg Ser His Thr Arg Ser	Lys Ser Arg Ser Ser	Ser Lys Ser His Ser
290	295	300
Arg Arg Lys Arg Ser Gln	Ser Lys His Arg Ser	Arg Ser His Asn Arg
305	310	315
Ser Arg Ser Arg Gln Lys	Asp Arg Arg Arg Ser	Lys Ser Pro His Lys
325	330	335
Lys Arg Ser Lys Ser Arg	Glu Arg Arg Lys Ser	Arg Ser Arg Ser His
340	345	350
Ser Arg Asp Lys Arg Lys	Asp Thr Arg Glu Lys	Ile Lys Glu Lys Glu
355	360	365
Arg Val Lys Glu Lys Asp	Arg Glu Lys Glu Arg	Glu Arg Glu Lys Glu
370	375	380
Arg Glu Lys Glu Lys Glu	Arg Gly Lys Asn Lys	Asp Arg Asp Lys Glu
385	390	395
Arg Glu Lys Asp Arg Glu	Lys Asp Lys Glu Lys	Asp Arg Glu Arg Glu
405	410	415
Arg Glu Lys Glu His Glu	Lys Asp Arg Asp Lys	Glu Lys Glu Lys Glu
420	425	430
Gln Asp Lys Glu Lys Glu	Arg Glu Lys Asp Arg	Ser Lys Glu Ile Asp
435	440	445
Glu Lys Lys Lys Glu Gly		
450		

&lt;210&gt; 3323

&lt;211&gt; 949

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3323

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420

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&lt;210&gt; 3324

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3324

Ile	Ile	Ile	Ser	Glu	Val	Asn	Cys	Ser	Leu	Gly	Arg	Asp	Thr	His	Ser
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Ile	Asn	Lys	His	Thr	Val	Val	Phe	Phe	Pro	Val	Leu	Phe	Gly	Tyr	Ala
			20					25					30		
Thr	Thr	Val	Ile	Pro	Arg	Val	Tyr	Thr	Tyr	Tyr	Val	Ser	Thr	Val	Leu
		35				40					45				
Phe	Ala	Ile	Phe	Gly	Ile	Arg	Met	Leu	Arg	Glu	Gly	Leu	Lys	Met	Ser
50					55					60					
Pro	Asp	Glu	Gly	Gln	Glu	Leu	Glu	Glu	Val	Gln	Ala	Glu	Leu	Lys	
65				70				75					80		
Lys	Lys	Asp	Glu	Glu	Val	Ser	His	Gly	Thr	Val	Asp	Leu	Asp	Gln	Lys
			85					90					95		
Gly	Thr	Gln	Leu	Gly	Ile	Asn	Thr	Leu	Gln	Arg	Phe	Leu	Ser	Gly	Pro
		100						105					110		
Ile	Cys	Val	Ile	Cys	Gly	Ala	Thr	Gln	Lys						
		115					120								

&lt;210&gt; 3325

&lt;211&gt; 5055

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3325

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100 105 110  
Ala Ala Leu Cys Arg Gln Leu Pro Met Glu Ala Glu Thr Leu Ala Pro  
115 120 125  
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130 135 140  
Ile Thr Asn Asn Ser Ser Asp Pro Phe Leu Asn Gly Gly Pro Tyr His  
145 150 155 160  
Ser Arg Glu Gln Ser Thr Asp Ser Gly Leu Gly Leu Gly Cys Tyr Ser  
165 170 175  
Val Pro Thr Thr Pro Glu Asp Phe Leu Ser Asn Val Asp Glu Met Asp  
180 185 190  
Thr Gly Glu Asn Ala Gly Gln Thr Pro Met Asn Ile Asn Pro Gln Gln  
195 200 205  
Thr Arg Phe Pro Asp Phe Leu Asp Cys Leu Pro Gly Thr Asn Val Asp  
210 215 220  
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<211> 521

<212> PRT

<213> Homo sapiens

<400> 3328

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His	Trp	Ser	Asp	Ser	Arg	Tyr	Glu	His	Val	Met	Lys	Leu	Arg	Gln	Ala
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Asp	Ala	Asp	Asn	Leu	Ile	Leu	Asn	Pro	Asp	Thr	Leu	Ser	Leu	Leu	Ile
65				70				75					80		
Ala	Glu	Asn	Lys	Thr	Val	Val	Ala	Pro	Met	Leu	Asp	Ser	Arg	Ala	Ala
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Tyr	Ser	Asn	Phe	Trp	Cys	Gly	Met	Thr	Ser	Gln	Gly	Tyr	Tyr	Lys	Arg
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Thr	Pro	Ala	Tyr	Ile	Pro	Ile	Arg	Lys	Arg	Asp	Arg	Arg	Gly	Cys	Phe
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Ala	Val	Pro	Met	Val	His	Ser	Thr	Phe	Leu	Ile	Asp	Leu	Arg	Lys	Ala
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Ser	Phe	Asp	Asp	Ile	Ile	Val	Phe	Ala	Phe	Ser	Cys	Lys	Gln	Ala	Glu
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Val	Gln	Met	Tyr	Val	Cys	Asn	Lys	Glu	Glu	Tyr	Gly	Phe	Leu	Pro	Val
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His	Val	Gln	Leu	Glu	Val	Met	Val	Lys	His	Pro	Pro	Ala	Glu	Pro	Ser
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Arg	Phe	Ile	Ser	Ala	Pro	Thr	Lys	Thr	Pro	Asp	Lys	Met	Gly	Phe	Asp
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Glu	Val	Phe	Met	Ile	Asn	Leu	Arg	Arg	Arg	Gln	Asp	Arg	Arg	Glu	Arg
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Ile Gln Met Leu Pro Gly Tyr Arg Asp Pro Tyr His Gly Arg Pro Leu					
290			295		300
Thr Lys Gly Glu Leu Gly Cys Phe Leu Ser His Tyr Asn Ile Trp Lys					
305			310		315
Glu Val Val Asp Arg Gly Leu Gln Lys Ser Leu Val Phe Glu Asp Asp					
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Leu Arg Phe Glu Ile Phe Phe Lys Arg Arg Leu Met Asn Leu Met Arg					
	340		345		350
Asp Val Glu Arg Glu Gly Leu Asp Trp Asp Leu Ile Tyr Val Gly Arg					
	355		360		365
Lys Arg Met Gln Val Glu His Pro Glu Lys Ala Val Pro Arg Val Arg					
	370		375		380
Asn Leu Val Glu Ala Asp Tyr Ser Tyr Trp Thr Leu Ala Tyr Val Ile					
385			390		395
Ser Leu Gln Gly Ala Arg Lys Leu Leu Ala Ala Glu Pro Leu Ser Lys					
	405		410		415
Met Leu Pro Val Asp Glu Phe Leu Pro Val Met Phe Asp Lys His Pro					
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Val Ser Glu Tyr Lys Ala His Phe Ser Leu Arg Asn Leu His Ala Phe					
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Ser Val Glu Pro Leu Leu Ile Tyr Pro Thr His Tyr Thr Gly Asp Asp					
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Gly Tyr Val Ser Asp Thr Glu Thr Ser Val Val Trp Asn Asn Glu His					
465			470		475
Val Lys Thr Asp Trp Asp Arg Ala Lys Ser Gln Lys Met Arg Glu Gln					
	485		490		495
Gln Ala Leu Ser Arg Glu Ala Lys Asn Ser Asp Val Leu Gln Ser Pro					
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Leu Asp Ser Ala Ala Arg Asp Glu Leu					
	515		520		

&lt;210&gt; 3329

&lt;211&gt; 705

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3329

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180

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240

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300

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360

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<210> 3330

<211> 235

<212> PRT

<213> Homo sapiens

<400> 3330

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		20					25					30			
Asn	Ser	Thr	Phe	Ala	Trp	Phe	Trp	Asn	Asp	Arg	Arg	Leu	His	Ala	Glu
		35				40						45			
Pro	Val	Pro	Thr	Leu	Ala	Phe	Thr	His	Val	Ala	Arg	Ala	Gln	Ala	Gly
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Met	Tyr	His	Cys	Leu	Ala	Glu	Leu	Pro	Thr	Gly	Ala	Ala	Ala	Ser	Ala
65				70				75						80	
Pro	Val	Met	Leu	Arg	Val	Leu	Tyr	Pro	Pro	Lys	Thr	Pro	Thr	Met	Met
			85					90						95	
Val	Phe	Val	Glu	Pro	Glu	Gly	Gly	Leu	Arg	Gly	Ile	Leu	Asp	Cys	Arg
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Val	Asp	Ser	Glu	Pro	Leu	Ala	Ser	Leu	Thr	Leu	His	Leu	Gly	Ser	Arg
	115						120					125			
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	130					135					140				
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145				150						155					160
Arg	Pro	Ser	Asp	Gln	Gly	Glu	Tyr	Ile	Cys	Ser	Ala	Ser	Asn	Val	Leu
			165					170						175	
Gly	Ser	Ala	Ser	Thr	Ser	Thr	Tyr	Phe	Gly	Val	Arg	Ala	Leu	His	Arg
		180					185						190		
Leu	His	Gln	Phe	Gln	Gln	Leu	Leu	Trp	Val	Leu	Gly	Leu	Leu	Val	Gly
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<210> 3331

<211> 1644

<212> DNA

<213> Homo sapiens

<400> 3331

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<212> PRT

<213> Homo sapiens

<400> 3332

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Ile Lys Ile Pro Gly Cys Arg Lys Gln Gly Leu Val His Arg Thr His
      35           40           45
Met Ser Ser Cys Arg Val Asp Lys Pro Ser Glu Ile Val Asp Val Gly
      50           55           60
Asp Lys Val Trp Val Lys Leu Ile Gly Arg Glu Met Lys Asn Asp Arg
      65           70           75           80
Ile Lys Val Ser Leu Ser Met Lys Val Val Asn Gln Gly Thr Gly Lys
      85           90           95
Asp Leu Asp Pro Asn Asn Val Ser Leu Ser Lys Lys Arg Gly Gly Gly
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Asp Pro Ser Arg Ile Thr Leu Gly Arg Arg Ser Pro Leu Arg Leu Ser
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<211> 2422

<212> DNA

<213> Homo sapiens

<400> 3333

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 50 55 60  
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 65 70 75 80  
 Gln Thr Glu Ala Leu Glu Phe Asn Pro Ser Ala Asn Pro Glu Ala Ser  
 85 90 95  
 Thr Ile Phe Gln Arg Asn Ser Gln Thr Asp Val Val Glu Ile Arg Arg  
 100 105 110  
 Ser Asn Cys Thr Asn His Val Ser Ala Val Arg Phe Ser Gln Gln Tyr  
 115 120 125  
 Ser Leu Cys Ser Thr Ile Phe Leu Asp Asp Ser Thr Ala Ile Gln His  
 130 135 140  
 Tyr Leu Thr Met Thr Ile Ser Val Thr Leu Glu Ile Pro His His  
 145 150 155 160  
 Ile Thr Gln Arg Asp Ala Asp Arg Thr Leu Ser Ile Pro Asp Glu Gln  
 165 170 175  
 Leu His Ser Phe Ala Val Ser Thr Val His Ile Met Lys Lys Arg Asn  
 180 185 190  
 Gly Gly Gly Ser Leu Asn Asn Tyr Ser Ser Ser Ile Pro Ser Thr Pro  
 195 200 205  
 Ser Thr Ser Gln Glu Asp Pro Gln Phe Ser Val Pro Pro Thr Ala Asn  
 210 215 220  
 Thr Pro Thr Pro Val Cys Lys Arg Ser Met Arg Trp Ser Asn Leu Phe  
 225 230 235 240  
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 245 250 255  
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 260 265 270  
 Gly Met Leu Leu Lys Arg Ser Gly Lys Trp Leu Lys Thr Trp Lys Lys  
 275 280 285  
 Lys Tyr Val Thr Leu Cys Ser Asn Gly Met Leu Thr Tyr Tyr Ser Ser  
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 305 310 315 320  
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Lys Lys Lys His Leu Lys Lys Lys Ser Thr Asn Asn Phe Met Ile Val
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Cys Val Asp Cys Glu Thr Gln Asn Pro Lys Trp Ala Ser Leu Asn Leu
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Asp Gly Cys Thr Ala Leu His Leu Ala Cys Arg Lys Gly Asn Val Val
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Ala His Gly Asn Thr Ala Leu Thr Tyr Ala Arg Gln Ala Ser Ser Gln
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Glu Cys Ile Asn Val Leu Leu Gln Tyr Gly Cys Pro Asp Lys Cys Val
          660          665          670

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&lt;210&gt; 3335

&lt;211&gt; 477

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3335

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60

ggcctcttca ggagtgcgt cccggacctc ctccccaggg ccctgctcat gctgtctcgg

120

cccagactgc ttgttgaagg ggttgagggtg ggcctgccgg aaacggggcca gcttctcatc  
 180  
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 240  
 tggccattcc tctagggctg ctggccacgg aagcctggcc gtgggttcgg cacctgctga  
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 ccgccgcctc gcatttgcgc tgagacaggg ctggacagcc aggattaccg ctgtgccgag  
 360  
 tgccggggcgc ccatctctct gcgggggtgtg cccagttagg ccaggcagtg cgactacacc  
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<210> 3336

<211> 59

<212> PRT

<213> Homo sapiens

<400> 3336

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Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile	Ser	Leu	Arg	Gly	Val	Pro	Ser
		20					25					30			
Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly	Gln	Tyr	Tyr	Cys	Ser	Pro	Cys
		35					40					45			
His	Trp	Asn	Ala	Leu	Ala	Val	Ile	Pro	Ala	Arg					
	50						55								

<210> 3337

<211> 679

<212> DNA

<213> Homo sapiens

<400> 3337

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 120  
 agcttagcct ccaaagacac agatagagtg agagagagag acagagagag acacagagac  
 180  
 agacagagac caaaacagaa gcggcaaacg gcaaaaacga agcagaatca atgcaagtta  
 240  
 gagaaaaaaa taaaactaaa catcagagca gggaaaagtc atctactccg tatcacacct  
 300  
 gtgtattagc ttaaccagaa ataagctgga agaggagtgc agtagcctct cagcccccta  
 360  
 aagatgttgg tcataccccc tctttcaccg tctgagtcga gaggacacca agccaaacaa  
 420  
 actgtgcccc aaactgggtc atctagtcct cccaggtcct tccttgctaa ctcgaggaaa  
 480  
 caaggaaaac caactttgga tggcaacttc aacaaggtaa ccctcctttc ttcaatggcc  
 540  
 agactgatgc cactgacaa tggctttgag atgcttggac agcagactgt catgtcaaga  
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 679

<210> 3338  
 <211> 102  
 <212> PRT  
 <213> Homo sapiens

<400> 3338  
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 20 25 30  
 Lys Glu Val Arg Trp Gly Ser Leu Ser Leu Ala Ser Lys Asp Thr Asp  
 35 40 45  
 Arg Val Arg Glu Arg Asp Arg Glu Arg His Arg Asp Arg Gln Arg Pro  
 50 55 60  
 Lys Gln Lys Arg Gln Thr Ala Lys Thr Lys Gln Asn Gln Cys Lys Leu  
 65 70 75 80  
 Glu Lys Lys Ile Lys Leu Asn Ile Arg Ala Gly Lys Ser His Leu Leu  
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 Arg Ile Thr Pro Val Tyr  
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<210> 3339  
 <211> 1341  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 240  
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 480  
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 540  
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 660

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 720  
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 780  
 acttgctaga gtggacatac cccagttta aagacagga tgaaactctg ctttagtgcc  
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 1341

&lt;210&gt; 3340

&lt;211&gt; 86

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3340

Met	Ser	Thr	Leu	Ala	Ser	Lys	Lys	Thr	Thr	Val	Thr	Arg	Ser	Ser	Asn
1				5				10					15		
Ser	Val	Asn	Ile	Phe	Leu	Tyr	Gln	Asn	Cys	Tyr	Tyr	Ala	Ala	Phe	Ile
		20					25					30			
Trp	Ala	Gly	Phe	Ile	Ile	Leu	His	Cys	Glu	Ile	Ala	Leu	Gln	Cys	Ile
		35					40					45			
Thr	Thr	Ala	Arg	Arg	Thr	Tyr	Ile	Tyr	Ile	Tyr	Ile	Lys	Asn	Ile	Ser
		50				55				60					
Asp	Ser	Cys	Ile	Gln	Met	Ser	Lys	Val	Phe	Val	Ala	Thr	Tyr	Tyr	Ile
65				70				75					80		
Ala	Tyr	Thr	Gln	Asn	His										
				85											

&lt;210&gt; 3341

&lt;211&gt; 1132

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3341

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 agctggagge accaggtctg aattccagac tctctccac caccacact tcacctcaa  
 120

ctggagcatg accacagacc cattcagga ggctggcgga ctcttcatcc tggacagtcc  
 180  
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 720  
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 780  
 aatatcgtgc acagagacct gaagctgggg aacatggtgc tcaacaagag gacacatcgg  
 840  
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 900  
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 960  
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 1020  
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 1080  
 accattcctg aggatggacg gggttctgag aacaccgtgt gtctcatccg ga  
 1132

&lt;210&gt; 3342

&lt;211&gt; 308

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3342

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 20 25 30  
 Gly Pro Phe Ile Leu Gly Pro Arg Leu Gly Asn Ser Pro Val Pro Ser  
 35 40 45  
 Ile Val Gln Cys Leu Ala Arg Lys Asp Gly Thr Asp Asp Phe Tyr Gln  
 50 55 60  
 Leu Lys Ile Leu Thr Leu Glu Glu Arg Gly Asp Gln Gly Ile Glu Ser  
 65 70 75 80  
 Gln Glu Glu Arg Gln Gly Lys Met Leu Leu His Thr Glu Tyr Ser Leu  
 85 90 95  
 Leu Ser Leu Leu His Thr Gln Asp Gly Val Val His His His Gly Leu

	100		105		110										
Phe	Gln	Asp	Arg	Thr	Cys	Glu	Ile	Val	Glu	Asp	Thr	Glu	Ser	Ser	Arg
	115						120					125			
Met	Val	Lys	Lys	Met	Lys	Lys	Arg	Ile	Cys	Leu	Val	Leu	Asp	Cys	Leu
	130						135					140			
Cys	Ala	His	Asp	Phe	Ser	Asp	Lys	Thr	Ala	Asp	Leu	Ile	Asn	Leu	Gln
145					150				155					160	
His	Tyr	Val	Ile	Lys	Glu	Lys	Arg	Leu	Ser	Glu	Arg	Glu	Thr	Val	Val
			165						170					175	
Ile	Phe	Tyr	Asp	Val	Val	Arg	Val	Val	Glu	Ala	Leu	His	Gln	Lys	Asn
			180					185					190		
Ile	Val	His	Arg	Asp	Leu	Lys	Leu	Gly	Asn	Met	Val	Leu	Asn	Lys	Arg
	195						200					205			
Thr	His	Arg	Ile	Thr	Ile	Thr	Asn	Phe	Cys	Leu	Gly	Lys	His	Leu	Val
	210					215					220				
Ser	Glu	Gly	Asp	Leu	Leu	Lys	Asp	Gln	Arg	Gly	Ser	Pro	Ala	Tyr	Ile
225				230						235				240	
Ser	Pro	Asp	Val	Leu	Ser	Gly	Arg	Pro	Tyr	Arg	Gly	Lys	Pro	Ser	Asp
			245					250					255		
Met	Trp	Ala	Leu	Gly	Val	Val	Leu	Phe	Thr	Met	Leu	Tyr	Gly	Gln	Phe
	260						265					270			
Pro	Phe	Tyr	Asp	Ser	Ile	Pro	Gln	Glu	Leu	Phe	Arg	Lys	Ile	Lys	Ala
	275					280					285				
Ala	Glu	Tyr	Thr	Ile	Pro	Glu	Asp	Gly	Arg	Val	Ser	Glu	Asn	Thr	Val
	290					295					300				
Cys	Leu	Ile	Arg												
305															

&lt;210&gt; 3343

&lt;211&gt; 594

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3343

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cggcctctcc tcagcggcgt gactgacacc gaggcgcgcc agccggggaa gtcgcccccc  
120

ttcagcatga actgggtcgt gggcagcgcg gacctggaga ttatcaacgc caccactggg  
180

cggaggagct gtggggggccc atcccggctc tgcaagcacg tgctgtctgc acggtgggcg  
240

cggctgtatg gcaggctgag cacacggaca ccagccctg gagacacgcc ctccatgtac  
300

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360

tttcagaagg ctggcctggg cacctgggtg aggaaaccac cggagcagca gcagtttcta  
420

ctgactctct aggctgcggg ctccctggctg ctggagctga gcgggacgct ggagggatgg  
480

gaccgtgtct ggggggacgac gtggcgggtc ggccgggttc ctgcattcgt ttacttttg  
540

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594

<210> 3344  
 <211> 143  
 <212> PRT  
 <213> Homo sapiens

<400> 3344  
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 20 25 30  
 Arg Gln Pro Gly Lys Ser Pro Pro Phe Ser Met Asn Trp Val Val Gly  
 35 40 45  
 Ser Ala Asp Leu Glu Ile Ile Asn Ala Thr Thr Gly Arg Arg Ser Cys  
 50 55 60  
 Gly Gly Pro Ser Arg Leu Cys Lys His Val Leu Ser Ala Arg Trp Ala  
 65 70 75 80  
 Arg Leu Tyr Gly Arg Leu Ser Thr Arg Thr Pro Ser Pro Gly Asp Thr  
 85 90 95  
 Pro Ser Met Tyr Cys Glu Ala Lys Leu Gly Ala His Thr Tyr Gln Ser  
 100 105 110  
 Val Lys Gln Gln Leu Phe Lys Ala Phe Gln Lys Ala Gly Leu Gly Thr  
 115 120 125  
 Trp Val Arg Lys Pro Pro Glu Gln Gln Gln Phe Leu Leu Thr Leu  
 130 135 140

<210> 3345  
 <211> 1149  
 <212> DNA  
 <213> Homo sapiens

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 1149

&lt;210&gt; 3346

&lt;211&gt; 263

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3346

Met	Glu	Tyr	Asp	Glu	Lys	Leu	Ala	Arg	Phe	Arg	Gln	Ala	His	Leu	Asn
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Pro	Phe	Asn	Lys	Gln	Ser	Gly	Pro	Arg	Gln	His	Glu	Gln	Gly	Pro	Gly
		20					25						30		
Glu	Glu	Val	Pro	Asp	Val	Thr	Pro	Glu	Glu	Ala	Leu	Pro	Glu	Leu	Pro
		35					40				45				
Pro	Gly	Glu	Pro	Glu	Phe	Arg	Cys	Pro	Glu	Arg	Val	Met	Asp	Leu	Gly
	50					55					60				
Leu	Ser	Glu	Asp	His	Phe	Ser	Arg	Pro	Val	Gly	Leu	Phe	Leu	Ala	Ser
	65				70					75				80	
Asp	Val	Gln	Gln	Leu	Arg	Gln	Ala	Ile	Glu	Glu	Cys	Lys	Gln	Val	Ile
			85						90				95		
Leu	Glu	Leu	Pro	Glu	Gln	Ser	Glu	Lys	Gln	Lys	Asp	Ala	Val	Val	Arg
		100					105					110			
Leu	Ile	His	Leu	Arg	Leu	Lys	Leu	Gln	Glu	Leu	Lys	Asp	Pro	Asn	Glu
	115					120					125				
Asp	Glu	Pro	Asn	Ile	Arg	Val	Leu	Leu	Glu	His	Arg	Phe	Tyr	Lys	Glu
	130					135					140				
Lys	Ser	Lys	Ser	Val	Lys	Gln	Thr	Cys	Asp	Lys	Cys	Asn	Thr	Ile	Ile
	145				150					155				160	
Trp	Gly	Leu	Ile	Gln	Thr	Trp	Tyr	Thr	Cys	Thr	Gly	Cys	Tyr	Tyr	Arg
			165					170					175		
Cys	His	Ser	Lys	Cys	Leu	Asn	Leu	Ile	Ser	Lys	Pro	Cys	Val	Ser	Ser
		180					185					190			
Lys	Val	Ser	His	Gln	Ala	Glu	Tyr	Glu	Leu	Asn	Ile	Cys	Pro	Glu	Thr
	195					200					205				
Gly	Leu	Asp	Ser	Gln	Asp	Tyr	Arg	Cys	Ala	Glu	Cys	Arg	Ala	Pro	Ile
	210					215					220				
Ser	Leu	Arg	Gly	Val	Pro	Ser	Glu	Ala	Arg	Gln	Cys	Asp	Tyr	Thr	Gly

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Gln Tyr Tyr Cys Ser His Cys His Trp Asn Asp Leu Ala Val Ile Pro						
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 <211> 2267  
 <212> DNA  
 <213> Homo sapiens

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 1800  
 ccagecttgt ctctctctt cctctgtcag ttcaaaaaga acagaaacct ccagctcttt  
 1860  
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 1920  
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 1980  
 gtaaccacc ctgtggcgct agtcgcagtg ctctggccaa cactatagca gggcttattc  
 2040  
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 2100  
 tatgtctacc tgtgtcaata taattccctg atttgagggc agctctctc attttcccca  
 2160  
 aaacagggaa agcaaggagt aaattcctct taaaatcaaa agctaataat atgcttcta  
 2220  
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 2267  
 <210> 3348  
 <211> 288  
 <212> PRT  
 <213> Homo sapiens

<400> 3348  
 Arg Cys Val Thr Cys Ala Met Glu Pro Lys Val Ala Glu Leu Lys Gln  
 1 5 10 15  
 Lys Ile Glu Asp Thr Leu Cys Pro Phe Gly Phe Glu Val Tyr Pro Phe  
 20 25 30  
 Gln Val Ala Trp Tyr Asn Glu Leu Leu Pro Pro Ala Phe His Leu Pro  
 35 40 45  
 Leu Pro Gly Pro Thr Leu Ala Phe Leu Val Leu Ser Thr Pro Ala Met  
 50 55 60  
 Phe Asp Arg Ala Leu Lys Pro Phe Leu Gln Ser Cys His Leu Arg Met  
 65 70 75 80  
 Leu Thr Asp Pro Val Asp Gln Cys Val Ala Tyr His Leu Gly Arg Val  
 85 90 95  
 Gly Glu Ser Leu Pro Glu Leu Gln Ile Glu Ile Ile Ala Asp Tyr Glu  
 100 105 110

Val His Pro Asn Arg Arg Pro Lys Ile Leu Ala Gln Thr Ala Ala His  
 115 120 125  
 Val Ala Gly Ala Ala Tyr Tyr Tyr Gln Arg Gln Asp Val Glu Ala Asp  
 130 135 140  
 Pro Trp Gly Asn Gln Arg Ile Ser Gly Val Cys Ile His Pro Arg Phe  
 145 150 155 160  
 Gly Gly Trp Phe Ala Ile Arg Gly Val Val Leu Leu Pro Gly Ile Glu  
 165 170 175  
 Val Pro Asp Leu Pro Pro Arg Lys Pro His Asp Cys Val Pro Thr Arg  
 180 185 190  
 Ala Asp Arg Ile Ala Leu Leu Glu Gly Phe Asn Phe His Trp Arg Asp  
 195 200 205  
 Trp Thr Tyr Arg Asp Ala Val Thr Pro Gln Glu Arg Tyr Ser Glu Glu  
 210 215 220  
 Gln Lys Ala Tyr Phe Ser Thr Pro Pro Ala Gln Arg Leu Ala Leu Leu  
 225 230 235 240  
 Gly Leu Ala Gln Pro Ser Glu Lys Pro Ser Ser Pro Ser Pro Asp Leu  
 245 250 255  
 Pro Phe Thr Thr Pro Ala Pro Lys Lys Pro Gly Asn Pro Ser Arg Ala  
 260 265 270  
 Arg Ser Trp Leu Ser Pro Arg Val Ser Pro Pro Ala Ser Pro Gly Pro  
 275 280 285

&lt;210&gt; 3349

&lt;211&gt; 1132

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3349

nnaaaatcgg ggcacggtca tcgtggagcg ctggtggaag gtaccgctgg ccggggaggg  
 60  
 ccggaagccg cgctgcacc ggcgacatcg cgtctataag ctggtggagg acacgaagca  
 120  
 tcggcccaaa gaaaacctgg agctcatcct gacgcagtcg gtggagagta aggcccgggc  
 180  
 cgaggcgctt cctctcagcg tgatgttgga gtccggggtg acctggtctc agtgaagaaa  
 240  
 tctttaggcc ggaatcgact ccttcctcag ggactggctg tatatgcac ccctgaaaac  
 300  
 aagaagctgt ttgaagagga gaaattgctg agacaagaag gaaaattaga gaagatccag  
 360  
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 420  
 aagaacaatg tcaaatggga gctgaaccct gaaatagttg cccgccactt ctttaagaat  
 480  
 cttggtgttg tggttgcccc acatacatta aagttaccag cagagcctat cacacggtgg  
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 ggcgagtatt ggtgtgaggt gacggtaaat gggcttgata ctgtgagagt gcctatgtct  
 600  
 gtcgtgaact ttgagaagcc caagaccaa agatataagt actggtttagc ccagcaagct  
 660  
 gccaaaggcta tggccccac cagccccag atctaaatct actctccctc caaggcagca  
 720

aagcagaatc gggagcagtg gagcagaaat gtgcaagcac cctgatctca ctcccagctc  
 780  
 tgaccaaata cagaatttta gagaacatct gaagacatca gactgcactg cgtatacatg  
 840  
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 900  
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 960  
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 1020  
 ccagtacttg cctcattctc atcatccaaa ctgaacattt gtatcccaag cagaaataaa  
 1080  
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 1132

&lt;210&gt; 3350

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3350

Gly	Pro	Gly	Arg	Gly	Ala	Ser	Ser	Gln	Ala	Asp	Val	Gly	Val	Arg	Gly
1				5				10						15	
Asp	Leu	Val	Ser	Val	Lys	Lys	Ser	Leu	Gly	Arg	Asn	Arg	Leu	Leu	Pro
			20					25					30		
Gln	Gly	Leu	Ala	Val	Tyr	Ala	Ser	Pro	Glu	Asn	Lys	Lys	Leu	Phe	Glu
		35					40					45			
Glu	Glu	Lys	Leu	Leu	Arg	Gln	Glu	Gly	Lys	Leu	Glu	Lys	Ile	Gln	Thr
		50				55					60				
Lys	Ala	Gly	Glu	Ala	Thr	Val	Lys	Phe	Leu	Lys	Ser	Cys	Arg	Leu	Glu
65					70				75					80	
Val	Gly	Met	Lys	Asn	Val	Lys	Trp	Glu	Leu	Asn	Pro	Glu	Ile	Val	
			85					90					95		
Ala	Arg	His	Phe	Phe	Lys	Asn	Leu	Gly	Val	Val	Val	Ala	Pro	His	Thr
			100					105					110		
Leu	Lys	Leu	Pro	Ala	Glu	Pro	Ile	Thr	Arg	Trp	Gly	Glu	Tyr	Trp	Cys
		115					120					125			
Glu	Val	Thr	Val	Asn	Gly	Leu	Asp	Thr	Val	Arg	Val	Pro	Met	Ser	Val
		130				135					140				
Val	Asn	Phe	Glu	Lys	Pro	Lys	Thr	Lys	Arg	Tyr	Lys	Tyr	Trp	Leu	Ala
145					150				155					160	
Gln	Gln	Ala	Ala	Lys	Ala	Met	Ala	Pro	Thr	Ser	Pro	Gln	Ile		
			165					170							

&lt;210&gt; 3351

&lt;211&gt; 1422

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3351

nnggaataca gaagagaaac tagaaatata cgtattttgt ttcacatttg aacagtcatt  
 60  
 cttgaggaat actccatacc tgagtagaca gccatgtggc catcgagct actaattttc  
 120

atgatgctct tagctccaat aattcatggt ggcaagcaca gtgaacgaca tctgcccctc  
 180  
 gctgctgcgc cgcgatgcgc tgagcgccgc caaggagggtg ttgtaccacc tggacatcta  
 240  
 cttcagcagc cagctgcaga gcgcgcccgt gcccatcgtg gacaagggcc ccgtggagct  
 300  
 gctggaggag ttcgtgttcc aggtgcccaa ggagcgcagc gcgcagccca agagactgaa  
 360  
 ttcccttcag gagcttcaac ttcttgaaat catgtgcaat tatttccagg agcaaaccaa  
 420  
 ggactctgtt cggcagatta ttttttcatc ccttttcagc cctcaaggga acaaagccga  
 480  
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 600  
 gttagccaag gccctttag atgactactg ctgtttggtg ccgggatcca ttcagacgct  
 660  
 gaagcagata ttcagtgcc gcccagagatt ctgctgccag ttcacacct ccgttaccgc  
 720  
 gctctatgac ctgtcatcag atgacctcat tccacctatg gacttgcttg aaatgattgt  
 780  
 cacctggatt tttgaggacc caaggttgat tctcatcact tttttaaata ctccgattgc  
 840  
 ggccaatctg ccaataggat tcttagagct caccgcgctc gttggattga tccgctgggtg  
 900  
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 960  
 cagcaacaag gtcacaaagg acccggggcgt ggggatggac agagactccc acctcttgta  
 1020  
 ctcaaaactc cacctcagcg tcttgcaagt gctcatgacg ctgcagctgc acctgaccga  
 1080  
 gaagaatctg tatgggcgcc tggggctgat cctcttcgac cacatgggtcc cgctggtaga  
 1140  
 ggagatcaac aggttggcgg atgaactgaa cccctcaac gcctcccagg agattgagct  
 1200  
 ctgcgtggac cggtggcgc aggtcttgca ggtggccatg gcctcaggag ctctgctgtg  
 1260  
 cagagagat gaccttagaa ccttgttctc caggctcccc cgtaataacc tctccagct  
 1320  
 ggtgatctcg ggtcccgtgc agcagtcgcc tcacgccgcg ctccccccgg ggttctaccc  
 1380  
 ccacatccac acgccccgc tgggctacgg ggctgtcccc cc  
 1422

&lt;210&gt; 3352

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3352

Met Trp Pro Ser Gln Leu Leu Ile Phe Met Met Leu Leu Ala Pro Ile  
 1 5 10 15  
 Ile His Gly Gly Lys His Ser Glu Arg His Pro Ala Leu Ala Ala Ala

```

                20                25                30
Pro Arg Cys Ala Glu Arg Arg Gln Gly Gly Val Val Pro Pro Gly His
      35                40                45
Leu Leu Gln Gln Pro Ala Ala Glu Arg Ala Ala Ala His Arg Gly Gln
      50                55                60
Gly Pro Arg Gly Ala Ala Gly Gly Val Arg Val Pro Gly Ala Gln Gly
65                70                75                80
Ala Gln Arg Ala Ala Gln Glu Thr Glu Phe Pro Ser Gly Ala Ser Thr
      85                90                95
Ser

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<210> 3353  
 <211> 420  
 <212> DNA  
 <213> Homo sapiens

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<400> 3353
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tttccatctc ctgaccagcc tgccaatgtg cctgtcctcc cacctgccat gaacacgggg
120
ggctccctac ctgacctcac caacctgcac tttccccac cactgccac cccctggac
180
cctgaagaga cagcctaccc tagcctgagt gggggcaaca gtacctcaa tttgaccac
240
accatgactc acctgggcat cagcaggggc atgggcctgg gccaggcta tgatgcacca
300
gggcgtcccc ctggatacca gtaaactgtc cactgaccag cggttacccc cataccata
360
cagttcccca agtttggtnt ctgcttacct agccccacac cccaaagttt taacagcagc
420

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<210> 3354  
 <211> 107  
 <212> PRT  
 <213> Homo sapiens

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<400> 3354
Xaa Lys Leu Ser Ser Ser Ser Arg Pro Arg Ser Cys Glu Val Pro
  1                5                10                15
Gly Ile Asn Ile Phe Pro Ser Pro Asp Gln Pro Ala Asn Val Pro Val
      20                25                30
Leu Pro Pro Ala Met Asn Thr Gly Gly Ser Leu Pro Asp Leu Thr Asn
      35                40                45
Leu His Phe Pro Pro Pro Leu Pro Thr Pro Leu Asp Pro Glu Glu Thr
      50                55                60
Ala Tyr Pro Ser Leu Ser Gly Gly Asn Ser Thr Ser Asn Leu Thr His
65                70                75                80
Thr Met Thr His Leu Gly Ile Ser Arg Gly Met Gly Leu Gly Pro Gly
      85                90                95
Tyr Asp Ala Pro Gly Arg Pro Pro Gly Tyr Gln
      100                105

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<210> 3355  
 <211> 474  
 <212> DNA  
 <213> Homo sapiens

<400> 3355  
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 60  
 gtaagattat ctccagccaa aatgtcaacc aagaattcta cagatctagt tgaatatgtt  
 120  
 gacaagagtc atgcttttct ccccatcatt ccaaacaccc agagaggtca gctagaagac  
 180  
 agactgaaca accaggcgcg taccatagct ttctttcttg aacaagcctt ccgcatcaag  
 240  
 gaggacatct ctgcttgccct gcaggggacc catggctttc gaaaagagga atcgctcgcc  
 300  
 aggaagttac tggaaagcca catccagacc atcaccagca tcgtcaaaaa actcagccaa  
 360  
 aatattgaga ttttagaaga ccaaataaga gctcgagatc aggcggccac aggaactaac  
 420  
 tttgcagtac acgagataaa catcaaacac ctacaaggag ttgggagatc tttc  
 474

<210> 3356  
 <211> 131  
 <212> PRT  
 <213> Homo sapiens

<400> 3356  
 Met Ser Thr Lys Asn Ser Thr Asp Leu Val Glu Tyr Val Asp Lys Ser  
 1 5 10 15  
 His Ala Phe Leu Pro Ile Ile Pro Asn Thr Gln Arg Gly Gln Leu Glu  
 20 25 30  
 Asp Arg Leu Asn Asn Gln Ala Arg Thr Ile Ala Phe Leu Leu Glu Gln  
 35 40 45  
 Ala Phe Arg Ile Lys Glu Asp Ile Ser Ala Cys Leu Gln Gly Thr His  
 50 55 60  
 Gly Phe Arg Lys Glu Glu Ser Leu Ala Arg Lys Leu Leu Glu Ser His  
 65 70 75 80  
 Ile Gln Thr Ile Thr Ser Ile Val Lys Lys Leu Ser Gln Asn Ile Glu  
 85 90 95  
 Ile Leu Glu Asp Gln Ile Arg Ala Arg Asp Gln Ala Ala Thr Gly Thr  
 100 105 110  
 Asn Phe Ala Val His Glu Ile Asn Ile Lys His Leu Gln Gly Val Gly  
 115 120 125  
 Arg Ser Phe  
 130

<210> 3357  
 <211> 2268  
 <212> DNA  
 <213> Homo sapiens

<400> 3357

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60  
agcagccatt atggatttgg atgtgctctt tatacccatg tctctaattg cagatggagg  
120  
agggcctata aaaataattc cttcttgctt acaaagttca gcaaattcca tgttttctga  
180  
aagaaaaccg catcctggat ggatagcctg tgcagcagag gtcttggcca cttgaatgat  
240  
tttctccata gataggtagc tctgctggga ggaacgggtt tggcgtgtgg gacgcagctg  
300  
cctctgtact ggggagtcac ggagtggccg ggctccaggg acatggcggc ggctctgctg  
360  
gtgtcgggtg tgctgggtggc ggaggagagg aaccgggtggc atcgtctccc gagcctgctc  
420  
ctgccgccga ggacatgggt gtggaggcaa agaaccatga agtacacaac agccacagga  
480  
agaaacatta ccaaggtcct cattgcaaac agaggagaaa ttgcctgcag ggtgatgcgc  
540  
acagccaaaa aactgggtgt acagactgtg gcggtttata gtgaggctga cagaaattcc  
600  
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660  
tacctatcta tggagaaaaat cattcaagtg gccaaagcct ctgctgcaca ggctatccat  
720  
ccaggatgctg gttttctttc agaaaacatg gaatttgctg aactttgtaa gcaagaagga  
780  
attattttta taggcctcc tccatctgca attagagaca tgggtataaa gagcacatcc  
840  
aaatccataa tggctgctgc tggagtacct gttgtggagg gttatcatgg tgaggaccaa  
900  
tcagaccagt gcctgaagga acacgccagg agaattggct atcctgtcat gattaaagcc  
960  
gtccgggggtg gaggaggaaa aggaatgagg attgttagat cagaacaaga atttcaagaa  
1020  
cagtttagat cagcacggag agaagctaag aagtctttca atgatgatgc tatgctgatc  
1080  
gagaagtttg tagacacacc gaggcattga gaagtcagg tgtttggtga tcaccatggc  
1140  
aatgctgtgt acttgtttga aagagactgt agtgtgcaga ggcgacatca gaagatcatt  
1200  
gaggaggccc cagcgcttg tattaatct gaagtaagaa aaaagctggg agaagctgca  
1260  
gtcagagctg ctaaagctgt aaattatgtt ggagcaggga ctgtggagtt tattatggac  
1320  
tcaaaacata atttctgttt catggagatg aatacaaggc tgcaagtgga acatcctgtt  
1380  
actgagatga tcacaggaac tgacttggtg gagtggcagc ttagaattgc agcaggagag  
1440  
aagattcctt tgagccagga agaaataact ctgcagggcc atgccttcga agctagaata  
1500  
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1560  
actcctcgag cagacccttc caccaggatt gaaactggag tacggcaagg agacgaagtt  
1620

tccgtgcatt atgaccccat gattgcgaag ctggctgtgt gggcagcaga tcgccaggcg  
 1680  
 gcattgacaa aactgaggta cagccttcgt cagtacaata ttgttggaact gcacaccaac  
 1740  
 attgacttct tactcaacct gtctggccac ccagagtttg aagctgggaa cgtgcacact  
 1800  
 gatttcatcc ctcaacacca caaacagttg ttgctcagtc ggaaggctgc agccaaagag  
 1860  
 tctttatgcc aggcagccct gggctctcct ctcaaggaga aagccatgac cgacactttc  
 1920  
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 1980  
 atctcgtata ccagaaacat gactcttaaa gatggtaaaa acagttttcg tctcctcgga  
 2040  
 taatcaacca ttccataact catgtaatct aggcatactc tggagttatt acagggttgg  
 2100  
 ttccagacca ctacaataaa atgtagccat agctgtaacg tataaccatg atgggtctta  
 2160  
 tagcatgcag attgaagata aaactttcca agtccttggt aatctttaca gcgagggaga  
 2220  
 ctgcacttac ctgaaatggt ctgttaatgg agttgctagt aaagcgaa  
 2268

&lt;210&gt; 3358

&lt;211&gt; 493

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3358

Gln	Thr	Val	Ala	Val	Tyr	Ser	Glu	Ala	Asp	Arg	Asn	Ser	Met	His	Val
1			5					10						15	
Asp	Met	Ala	Asp	Glu	Ala	Tyr	Ser	Ile	Gly	Pro	Ala	Pro	Ser	Gln	Gln
		20						25				30			
Ser	Tyr	Leu	Ser	Met	Glu	Lys	Ile	Ile	Gln	Val	Ala	Lys	Thr	Ser	Ala
		35				40						45			
Ala	Gln	Ala	Ile	His	Pro	Gly	Cys	Gly	Phe	Leu	Ser	Glu	Asn	Met	Glu
	50					55					60				
Phe	Ala	Glu	Leu	Cys	Lys	Gln	Glu	Gly	Ile	Ile	Phe	Ile	Gly	Pro	Pro
65					70				75					80	
Pro	Ser	Ala	Ile	Arg	Asp	Met	Gly	Ile	Lys	Ser	Thr	Ser	Lys	Ser	Ile
				85				90						95	
Met	Ala	Ala	Ala	Gly	Val	Pro	Val	Val	Glu	Gly	Tyr	His	Gly	Glu	Asp
		100						105					110		
Gln	Ser	Asp	Gln	Cys	Leu	Lys	Glu	His	Ala	Arg	Arg	Ile	Gly	Tyr	Pro
		115				120						125			
Val	Met	Ile	Lys	Ala	Val	Arg	Gly	Gly	Gly	Gly	Lys	Gly	Met	Arg	Ile
	130					135					140				
Val	Arg	Ser	Glu	Gln	Glu	Phe	Gln	Glu	Gln	Leu	Glu	Ser	Ala	Arg	Arg
145					150					155				160	
Glu	Ala	Lys	Lys	Ser	Phe	Asn	Asp	Asp	Ala	Met	Leu	Ile	Glu	Lys	Phe
				165					170					175	
Val	Asp	Thr	Pro	Arg	His	Val	Glu	Val	Gln	Val	Phe	Gly	Asp	His	His
		180						185					190		
Gly	Asn	Ala	Val	Tyr	Leu	Phe	Glu	Arg	Asp	Cys	Ser	Val	Gln	Arg	Arg

195	200	205
His Gln Lys Ile Ile Glu Glu Ala Pro Ala Pro Gly Ile Lys Ser Glu		
210	215	220
Val Arg Lys Lys Leu Gly Glu Ala Ala Val Arg Ala Ala Lys Ala Val		
225	230	235
Asn Tyr Val Gly Ala Gly Thr Val Glu Phe Ile Met Asp Ser Lys His		
245	250	255
Asn Phe Cys Phe Met Glu Met Asn Thr Arg Leu Gln Val Glu His Pro		
260	265	270
Val Thr Glu Met Ile Thr Gly Thr Asp Leu Val Glu Trp Gln Leu Arg		
275	280	285
Ile Ala Ala Gly Glu Lys Ile Pro Leu Ser Gln Glu Glu Ile Thr Leu		
290	295	300
Gln Gly His Ala Phe Glu Ala Arg Ile Tyr Ala Glu Asp Pro Ser Asn		
305	310	315
Asn Phe Met Pro Val Ala Gly Pro Leu Val His Leu Ser Thr Pro Arg		
325	330	335
Ala Asp Pro Ser Thr Arg Ile Glu Thr Gly Val Arg Gln Gly Asp Glu		
340	345	350
Val Ser Val His Tyr Asp Pro Met Ile Ala Lys Leu Val Val Trp Ala		
355	360	365
Ala Asp Arg Gln Ala Ala Leu Thr Lys Leu Arg Tyr Ser Leu Arg Gln		
370	375	380
Tyr Asn Ile Val Gly Leu His Thr Asn Ile Asp Phe Leu Leu Asn Leu		
385	390	395
Ser Gly His Pro Glu Phe Glu Ala Gly Asn Val His Thr Asp Phe Ile		
405	410	415
Pro Gln His His Lys Gln Leu Leu Leu Ser Arg Lys Ala Ala Ala Lys		
420	425	430
Glu Ser Leu Cys Gln Ala Ala Leu Gly Leu Ile Leu Lys Glu Lys Ala		
435	440	445
Met Thr Asp Thr Phe Thr Leu Gln Ala His Asp Gln Phe Ser Pro Phe		
450	455	460
Ser Ser Ser Ser Gly Arg Arg Leu Asn Ile Ser Tyr Thr Arg Asn Met		
465	470	475
Thr Leu Lys Asp Gly Lys Asn Ser Phe Arg Leu Leu Gly		
485	490	

&lt;210&gt; 3359

&lt;211&gt; 652

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3359

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60

gcctatacct actgtagctt ctccacgtat ggaccctaaa ggctactgct gctactacgg  
120

ggctagacag ttactgtctc agctctagga tgtgcgttct tccactagaa gctcttctga  
180

gggaggtaat taaaaaacag tggaatggaa aaacagtgtc gtagtcatcc tgtaatatgc  
240

tccttgtcaa caatgtatac attcctgcta ggtgccatat tcattgcttt aagctcaagt  
300

cgcatcttac tagtgaagta ttctgccaat gaagaaaaca agtatgatta tcttccaact  
 360  
 actgtgaatg tgtgctcaga actggtgaag ctagttttct gtgtgcttgt gtcattctgt  
 420  
 gttataaaga aagatcatca aagtagaaat ttgaaatatg cttcctggaa ggaattctct  
 480  
 gatttcatga agtgggccat tctgccttt ctttatttcc tggataactt gattgtcttc  
 540  
 tatgtctgt cctatcttca accagccatg gctgttatct tctcaaattt tagcattata  
 600  
 acaacagctc ttctattcag gatagtgtg aagaggcgtc taaactggat cc  
 652

<210> 3360

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3360

Met	Glu	Lys	Gln	Cys	Cys	Ser	His	Pro	Val	Ile	Cys	Ser	Leu	Ser	Thr
1			5						10				15		
Met	Tyr	Thr	Phe	Leu	Leu	Gly	Ala	Ile	Phe	Ile	Ala	Leu	Ser	Ser	Ser
			20				25					30			
Arg	Ile	Leu	Leu	Val	Lys	Tyr	Ser	Ala	Asn	Glu	Glu	Asn	Lys	Tyr	Asp
		35				40					45				
Tyr	Leu	Pro	Thr	Thr	Val	Asn	Val	Cys	Ser	Glu	Leu	Val	Lys	Leu	Val
	50					55				60					
Phe	Cys	Val	Leu	Val	Ser	Phe	Cys	Val	Ile	Lys	Lys	Asp	His	Gln	Ser
65					70					75				80	
Arg	Asn	Leu	Lys	Tyr	Ala	Ser	Trp	Lys	Glu	Phe	Ser	Asp	Phe	Met	Lys
			85					90						95	
Trp	Ser	Ile	Pro	Ala	Phe	Leu	Tyr	Phe	Leu	Asp	Asn	Leu	Ile	Val	Phe
			100					105					110		
Tyr	Val	Leu	Ser	Tyr	Leu	Gln	Pro	Ala	Met	Ala	Val	Ile	Phe	Ser	Asn
		115				120					125				
Phe	Ser	Ile	Ile	Thr	Thr	Ala	Leu	Leu	Phe	Arg	Ile	Val	Leu	Lys	Arg
	130					135					140				
Arg	Leu	Asn	Trp	Ile											
145															

<210> 3361

<211> 1040

<212> DNA

<213> Homo sapiens

<400> 3361

nntccgatg gtctggcgcg ctgggctcgc taggtttgtg ctggcgaggg gacgggggtgg  
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 gacgggagac ccggacccaa gaagtgggag gaccgcgcgt gtcgcggcct agcggcgagg  
 120  
 ggagtcgcct gcgcgcgcag cggaggccag tgcgccggcg catagcgagc ccgggtctgt  
 180  
 gatcgccgag gcgggagtg agatagtcca agtcctaaga gacagcgcct ctctcattca  
 240

gtctttgatt atacatcagc atcaccagct ccctcaccac caatgagacc atgggagatg  
 300  
 acatcaaata ggcagccccc tttagttcga ccaagccaac atcacttctc aggggaacga  
 360  
 tgcaacacac ctgcacgcaa cagaagaagt cctcctgtca ggcgccagag aggaagaagg  
 420  
 gatcgtctgt ctgcacataa ttccattagt caagatgaaa actatcacca tctcccttac  
 480  
 gcacagcagc aagcaataga ggagcctcga gccttccacc ctccgaatgt atctccccgt  
 540  
 ctgctacatc ctgctgtcga tccaccccag cagaatgcag tcatgggtga catacatgat  
 600  
 cagctccatc aaggaacagt ccctgtttct tacacagtaa caacagtggc accacatggg  
 660  
 attccactct gcacaggcca gcacatccct gctttagtagta cacagcaggt cccaggatgc  
 720  
 tctgtggttt tcagtggaca gcacctccct gtctgtagtg tgcctcctcc aatgcttcag  
 780  
 gcatgttcag ttcagcactt accagtacca tatgctgcat tccccccct tatttctagt  
 840  
 gatccatttc ttatacatcc tctcacctt tctccccatc atcctcctca ttgcccacca  
 900  
 ccaggccagt ttgtcccttt ccaaacacag caatcacgat cgcctctgca aaggatagaa  
 960  
 aatgaagtgg aactcttagg agaacatctt ccaggagccc acccccagca cccccatctg  
 1020  
 ttaataaata tctcaactcc  
 1040

&lt;210&gt; 3362

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3362

Met	Arg	Pro	Trp	Glu	Met	Thr	Ser	Asn	Arg	Gln	Pro	Pro	Ser	Val	Arg
1				5				10						15	
Pro	Ser	Gln	His	His	Phe	Ser	Gly	Glu	Arg	Cys	Asn	Thr	Pro	Ala	Arg
		20					25					30			
Asn	Arg	Arg	Ser	Pro	Pro	Val	Arg	Arg	Gln	Arg	Gly	Arg	Arg	Asp	Arg
	35					40					45				
Leu	Ser	Arg	His	Asn	Ser	Ile	Ser	Gln	Asp	Glu	Asn	Tyr	His	His	Leu
50				55				60							
Pro	Tyr	Ala	Gln	Gln	Gln	Ala	Ile	Glu	Glu	Pro	Arg	Ala	Phe	His	Pro
65				70				75						80	
Pro	Asn	Val	Ser	Pro	Arg	Leu	Leu	His	Pro	Ala	Ala	His	Pro	Pro	Gln
			85					90					95		
Gln	Asn	Ala	Val	Met	Val	Asp	Ile	His	Asp	Gln	Leu	His	Gln	Gly	Thr
		100				105						110			
Val	Pro	Val	Ser	Tyr	Thr	Val	Thr	Thr	Val	Ala	Pro	His	Gly	Ile	Pro
	115					120						125			
Leu	Cys	Thr	Gly	Gln	His	Ile	Pro	Ala	Cys	Ser	Thr	Gln	Gln	Val	Pro
130					135						140				
Gly	Cys	Ser	Val	Val	Phe	Ser	Gly	Gln	His	Leu	Pro	Val	Cys	Ser	Val

145                      150                      155                      160  
 Pro Pro Pro Met Leu Gln Ala Cys Ser Val Gln His Leu Pro Val Pro  
                          165                      170                      175  
 Tyr Ala Ala Phe Pro Pro Leu Ile Ser Ser Asp Pro Phe Leu Ile His  
                          180                      185                      190  
 Pro Pro His Leu Ser Pro His His Pro Pro His Leu Pro Pro Gly  
                          195                      200                      205  
 Gln Phe Val Pro Phe Gln Thr Gln Gln Ser Arg Ser Pro Leu Gln Arg  
                          210                      215                      220  
 Ile Glu Asn Glu Val Glu Leu Leu Gly Glu His Leu Pro Gly Ala His  
 225                      230                      235                      240  
 Pro Gln His Pro His Leu Leu Ile Asn Ile Ser Thr  
                          245                      250

&lt;210&gt; 3363

&lt;211&gt; 718

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3363

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 60  
 ggccagcatg atcagggacc ccgtcatgcc catgattttt tgggtggcat tggcgaccga  
 120  
 gtagctcagg agtgtctccg gagccactg gagaagcccc ccaacggcct cctcttcccc  
 180  
 cagcacgggg actatcagta cggccgcaac aacatctaaa cagaccactt ccaatacagc  
 240  
 eggcagagct acccaaactc gtacagtttg aaccgctatg atgtgtagag tccaaaggac  
 300  
 aggaccagac tgttggtgac tccttccccg gccccacag cagtatcaga aacttctgac  
 360  
 aatcagtga tgtacaacc agccgagggg acggtgcata actctccatc agaagccctg  
 420  
 gggttcctgg cccccctga gccgcaggag gatgcgttgc ctgcagtga gacggcctg  
 480  
 agctctgggc aaacctaaac agagaccagt gtcccatgct ctttcttctt ggagcctgtc  
 540  
 atctgagggc cgtgtccctg cggagatctt ggccacgttg tacctttcca tgtggaatta  
 600  
 ttccccaaag agtgtagctc agagcacttg tgtctgcatt ccagataaca ttcaggacct  
 660  
 gtgtgaaaag ctggggtcac tgtggctgta gaccatgaac tggcagtggg ggtgtcca  
 718

&lt;210&gt; 3364

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3364

Met Gly His Trp Ser Leu Phe Arg Phe Ala Gln Ser Ser Arg Pro Ser  
 1                      5                      10                      15  
 Ala Leu Gln Ala Thr His Pro Pro Ala Ala His Gly Gly Pro Gly Thr

```
<210> 3365
<211> 2389
<212> DNA
<213> Homo sapiens
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2545

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900  
gaaacattta gagacatctt atgtagacaa gttgacacgc tacagaagta ctttgatgcc  
960  
tgtgtgatg ctgtctctaa ggatgaactt caaagggata aagtggtaga agatgatgaa  
1020  
gatgactttc ctacaacgcg ttctgatggg gacttcttgc atagtaccaa cggcaataaa  
1080  
gaaaagttat ttccacatgt gacaccaaaa ggaattaatg gtatagactt taaaggggaa  
1140  
gcgataactt ttaaagcaac tactgctgga atccttgcaa cactttctca ttgtattgaa  
1200  
ctaattggta aacgtgagga cagctggcag aagagactgg ataaggaaac tgagaagaaa  
1260  
agaagaacag aggaagcata taaaaatgca atgacagaac ttaagaaaaa atcccacttt  
1320  
ggaggaccag attatgaaga aggccctaac agtctgatta atgaagaaga gttctttgat  
1380  
gctgttgaag ctgctcttga cagacaagat aaaatagaag aacagtcaca gagtgaaaag  
1440  
gtgagattac attggcctac atccttgccc tctggagatg ccttttcttc tgtggggaca  
1500  
catagatttg tccaaaagcc ctatagtgcg tcttctcca tgtcttccat tgatctagtc  
1560  
agtgcctctg atgatgttca cagattcagc tcccaggttg aagagatggg gcagaaccac  
1620  
atgacttact cattacagga tgtaggcgga gatgccaatt ggcagtggg tgtagaagaa  
1680  
ggagaaatga aggtatacag aagagaagta gaagaaaatg ggattgttct ggatccttta  
1740  
aaagctaccc atgcagttaa aggcgtcaca ggacatgaag tctgcaatta tttctggaat  
1800  
gttgacgttc gcaatgactg ggaaacaact atagaaaact ttcatgtggg ggaaacatta  
1860  
gctgataatg caatcatcat ttatcaaaca cacaagaggg tgtggcctgc ttctcagcga  
1920  
gacgtattat atctttctgt cattcgaaag ataccagcct tgactgaaaa tgaccctgaa  
1980  
acttgatag tttgtaattt ttctgtggat catgacagtg ctctctaaa caaccgatgt  
2040  
gtccgtgcc aataaatgt tgctatgatt tgtcaaacct tggtaagccc accagagggg  
2100  
aaccaggaaa ttagcaggga caacattcta tgcaagatta catatgtagc taatgtgaac  
2160  
cctggaggat gggcaccagc ctcagtgtta agggcagtgg caaagcgaga gtatcctaaa  
2220  
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2280  
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2340  
gactgtcaat actaaaattt agttgttgaa agtatttact atgtttttt  
2389

&lt;210&gt; 3366

&lt;211&gt; 624

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3366

```

Met Ser Asp Asn Gln Asn Trp Asn Ser Ser Gly Ser Glu Glu Asp Pro
 1          5          10          15
Glu Thr Glu Ser Gly Pro Pro Val Glu Arg Cys Gly Val Leu Ser Lys
      20          25          30
Trp Thr Asn Tyr Ile His Gly Trp Gln Asp Arg Trp Val Val Leu Lys
      35          40          45
Asn Asn Ala Leu Ser Tyr Tyr Lys Ser Glu Asp Glu Thr Glu Tyr Gly
 50          55          60
Cys Arg Gly Ser Ile Cys Leu Ser Lys Ala Val Ile Thr Pro His Asp
65          70          75          80
Phe Asp Glu Cys Arg Phe Asp Ile Ser Val Asn Asp Ser Val Trp Tyr
      85          90          95
Leu Arg Ala Gln Asp Pro Asp His Arg Gln Gln Trp Ile Asp Ala Ile
      100          105          110
Glu Gln His Lys Thr Glu Ser Gly Tyr Gly Ser Glu Ser Ser Leu Arg
      115          120          125
Arg His Gly Ser Met Val Ser Leu Val Ser Gly Ala Ser Gly Tyr Ser
      130          135          140
Ala Thr Ser Thr Ser Ser Phe Lys Lys Gly His Ser Leu Arg Glu Lys
      145          150          155          160
Leu Ala Glu Met Glu Thr Phe Arg Asp Ile Leu Cys Arg Gln Val Asp
      165          170          175
Thr Leu Gln Lys Tyr Phe Asp Ala Cys Ala Asp Ala Val Ser Lys Asp
      180          185          190
Glu Leu Gln Arg Asp Lys Val Val Glu Asp Asp Glu Asp Asp Phe Pro
      195          200          205
Thr Thr Arg Ser Asp Gly Asp Phe Leu His Ser Thr Asn Gly Asn Lys
      210          215          220
Glu Lys Leu Phe Pro His Val Thr Pro Lys Gly Ile Asn Gly Ile Asp
      225          230          235          240
Phe Lys Gly Glu Ala Ile Thr Phe Lys Ala Thr Thr Ala Gly Ile Leu
      245          250          255
Ala Thr Leu Ser His Cys Ile Glu Leu Met Val Lys Arg Glu Asp Ser
      260          265          270
Trp Gln Lys Arg Leu Asp Lys Glu Thr Glu Lys Lys Arg Arg Thr Glu
      275          280          285
Glu Ala Tyr Lys Asn Ala Met Thr Glu Leu Lys Lys Lys Ser His Phe
      290          295          300
Gly Gly Pro Asp Tyr Glu Glu Gly Pro Asn Ser Leu Ile Asn Glu Glu
      305          310          315          320
Glu Phe Phe Asp Ala Val Glu Ala Ala Leu Asp Arg Gln Asp Lys Ile
      325          330          335
Glu Glu Gln Ser Gln Ser Glu Lys Val Arg Leu His Trp Pro Thr Ser
      340          345          350
Leu Pro Ser Gly Asp Ala Phe Ser Ser Val Gly Thr His Arg Phe Val
      355          360          365
Gln Lys Pro Tyr Ser Arg Ser Ser Ser Met Ser Ser Ile Asp Leu Val
      370          375          380
Ser Ala Ser Asp Asp Val His Arg Phe Ser Ser Gln Val Glu Glu Met

```

```

385          390          395          400
Val Gln Asn His Met Thr Tyr Ser Leu Gln Asp Val Gly Gly Asp Ala
          405          410          415
Asn Trp Gln Leu Val Val Glu Glu Gly Glu Met Lys Val Tyr Arg Arg
          420          425          430
Glu Val Glu Glu Asn Gly Ile Val Leu Asp Pro Leu Lys Ala Thr His
          435          440          445
Ala Val Lys Gly Val Thr Gly His Glu Val Cys Asn Tyr Phe Trp Asn
          450          455          460
Val Asp Val Arg Asn Asp Trp Glu Thr Thr Ile Glu Asn Phe His Val
465          470          475          480
Val Glu Thr Leu Ala Asp Asn Ala Ile Ile Ile Tyr Gln Thr His Lys
          485          490          495
Arg Val Trp Pro Ala Ser Gln Arg Asp Val Leu Tyr Leu Ser Val Ile
          500          505          510
Arg Lys Ile Pro Ala Leu Thr Glu Asn Asp Pro Glu Thr Trp Ile Val
          515          520          525
Cys Asn Phe Ser Val Asp His Asp Ser Ala Pro Leu Asn Asn Arg Cys
          530          535          540
Val Arg Ala Lys Ile Asn Val Ala Met Ile Cys Gln Thr Leu Val Ser
545          550          555          560
Pro Pro Glu Gly Asn Gln Glu Ile Ser Arg Asp Asn Ile Leu Cys Lys
          565          570          575
Ile Thr Tyr Val Ala Asn Val Asn Pro Gly Gly Trp Ala Pro Ala Ser
          580          585          590
Val Leu Arg Ala Val Ala Lys Arg Glu Tyr Pro Lys Phe Leu Lys Arg
          595          600          605
Phe Thr Ser Tyr Val Gln Glu Lys Thr Ala Gly Lys Pro Ile Leu Phe
        610          615          620

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&lt;210&gt; 3367

&lt;211&gt; 366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3367

```

acgcgtgcag gagaggagag gccaggagat agggagggca gtttgtggat tgaaatgacc
60
gagaattacg ccacagaggt gttggaggct ggcacgtgg catctcagga gcacggaggg
120
tgccttcccc acttcaggcc tcttagtgtc aaggatgtga gaggcaaggg ctgctgggag
180
agtattttac ggactgaagg aggcgtgccg cctgccctgc cctcctactg gtggaggaag
240
gaggtgctgg gagccccaca actcagggcc ccccgacgcc cagtaaggcc actgtacacc
300
cctcctgacc cagaccataa ccagcctccg attgtgcttt tgaccctgtt tccttcaggc
360
accagg
366

```

&lt;210&gt; 3368

&lt;211&gt; 104

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3368

```

Met Thr Glu Asn Tyr Ala Thr Glu Val Leu Glu Ala Gly Ile Val Ala
 1           5           10           15
Ser Gln Glu His Gly Gly Cys Leu Pro His Phe Arg Pro Leu Ser Val
          20           25           30
Lys Asp Val Arg Gly Lys Gly Cys Trp Glu Ser Ile Leu Arg Thr Glu
          35           40           45
Gly Gly Val Pro Pro Ala Leu Pro Ser Tyr Trp Trp Arg Lys Glu Val
          50           55           60
Leu Gly Ala Pro Gln Leu Arg Ala Pro Arg Arg Pro Val Arg Pro Leu
65           70           75           80
Tyr Thr Pro Pro Asp Pro Asp His Asn Gln Pro Pro Ile Val Leu Leu
          85           90           95
Thr Leu Phe Pro Ser Gly Thr Arg
          100

```

&lt;210&gt; 3369

&lt;211&gt; 1405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3369

```

cttggtccag ggaaaagctt tcagcagcaa aggggaagcca tgaaacaaac catagaagaa
60
gataaggagc agaaaaatca ggaaaactgt ggtgcaaaga agaataaaaa gaagaggaaa
120
aagggtttat ataatgcaa taaaaatgat gattatgaca acgaggagat cttaacctat
180
gaggaaatgt cactttatca tcagccagca aataggaaga gacctatcat cttgattggt
240
ccacagaact gtggccagaa tgaattgcgt cagaggctca tgaacaaaga aaaggaccgc
300
tttgcactcg cagttcctca tacaaccgg agtaggcgag accaagaagt agccggtaga
360
gattaccact ttgtttcgcg gcaagcattc gaggcagaca tagcagctgg aaagttcatt
420
gagcatggtg aatttgagaa gaatttgtat ggaactagca tagattctgt acggcaagtg
480
atcaactctg gcaaaatatg tcttttaagt ctctgtacac agtcattgaa gactctccgg
540
aattcagatt tgaaaccata tattatcttc attgcacccc cttcacaaga aagacttcgg
600
gcattattgg ccaaagaagg caagaatcca aagcctgaag agttgagaga aatcattgag
660
aagacaagag agatggagca gaacaatggc cactactttg atacggcaat tgtgaattcc
720
gatcttgata aagcctatca ggaattgctt aggttaatta acaaacttga tactgaacct
780
cagtgggtac catccacttg gctgaggtga aagaaacatc cattctgtgg catgttgagc
840
ttgatctggc aaaaactgcc aataggagga ctgcccagca ctgcagcaag attgaggata
900

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agatggaagg cagcagtata agctgtagat ctgttcttag atctcttgaa ttagtgagac  
 960  
 gacagttccc ttaggcagtt tgtgcatggc atcctttatt ctctatacat ggcttttagcg  
 1020  
 gttcttgctt ctttttggga ttctaaatgg aagctttcaa cagagcattc cttttgtcc  
 1080  
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 1140  
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 1200  
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 1260  
 actgggcaag gcagtatttg cttaggaaac taatttagtc atcagagata ctttcctaaa  
 1320  
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 1380  
 attcatttat atgtcttttg attct  
 1405

&lt;210&gt; 3370

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3370

Leu	Val	Pro	Gly	Lys	Sér	Phe	Gln	Gln	Gln	Arg	Glu	Ala	Met	Lys	Gln
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Thr	Ile	Glu	Glu	Asp	Lys	Glu	Gln	Lys	Asn	Gln	Glu	Asn	Cys	Gly	Ala
			20					25					30		
Lys	Lys	Asn	Lys	Lys	Lys	Arg	Lys	Lys	Val	Leu	Tyr	Asn	Ala	Asn	Lys
		35					40					45			
Asn	Asp	Asp	Tyr	Asp	Asn	Glu	Ile	Leu	Thr	Tyr	Glu	Glu	Met	Ser	
50					55					60					
Leu	Tyr	His	Gln	Pro	Ala	Asn	Arg	Lys	Arg	Pro	Ile	Ile	Leu	Ile	Gly
65					70				75					80	
Pro	Gln	Asn	Cys	Gly	Gln	Asn	Glu	Leu	Arg	Gln	Arg	Leu	Met	Asn	Lys
			85					90						95	
Glu	Lys	Asp	Arg	Phe	Ala	Ser	Ala	Val	Pro	His	Thr	Thr	Arg	Ser	Arg
			100					105					110		
Arg	Asp	Gln	Glu	Val	Ala	Gly	Arg	Asp	Tyr	His	Phe	Val	Ser	Arg	Gln
		115				120						125			
Ala	Phe	Glu	Ala	Asp	Ile	Ala	Ala	Gly	Lys	Phe	Ile	Glu	His	Gly	Glu
	130					135					140				
Phe	Glu	Lys	Asn	Leu	Tyr	Gly	Thr	Ser	Ile	Asp	Ser	Val	Arg	Gln	Val
145				150					155					160	
Ile	Asn	Ser	Gly	Lys	Ile	Cys	Leu	Leu	Ser	Leu	Arg	Thr	Gln	Ser	Leu
			165					170					175		
Lys	Thr	Leu	Arg	Asn	Ser	Asp	Leu	Lys	Pro	Tyr	Ile	Ile	Phe	Ile	Ala
		180						185					190		
Pro	Pro	Ser	Gln	Glu	Arg	Leu	Arg	Ala	Leu	Leu	Ala	Lys	Glu	Gly	Lys
		195				200						205			
Asn	Pro	Lys	Pro	Glu	Glu	Leu	Arg	Glu	Ile	Ile	Glu	Lys	Thr	Arg	Glu
	210					215					220				
Met	Glu	Gln	Asn	Asn	Gly	His	Tyr	Phe	Asp	Thr	Ala	Ile	Val	Asn	Ser

<400> 3372

Gly	Thr	Ala	Val	Arg	Val	Val	Leu	Val	Pro	Ala	Phe	Ala	Leu	Ala	Lys
1				5					10					15	
Glu	Ala	Pro	Arg	Glu	His	Leu	Asp	His	Gln	Ala	Ala	His	Gln	Pro	Phe
			20					25					30		
Pro	Arg	Pro	Arg	Phe	Arg	Gln	Glu	Thr	Gly	His	Pro	Ser	Leu	Gln	Arg
		35					40					45			
Asp	Phe	Pro	Arg	Ser	Phe	Leu	Leu	Asp	Leu	Pro	Asn	Phe	Pro	Asp	Leu

50                      55                      60  
 Ser Lys Ala Asp Ile Asn Gly Gln Asn Pro Asn Ile Gln Val Thr Ile  
 65                      70                      75                      80  
 Glu Val Val Asp Gly Pro Asp Ser Glu Ala Asp Lys Asp Gln His Pro  
                     85                      90                      95  
 Glu Asn Lys Pro Ser Trp Ser Val Pro Ser Pro Asp Trp Arg Ala Trp  
                     100                      105                      110  
 Trp Gln Arg Ser Leu Ser Leu Ala Arg Ala Asn Ser Gly Asp Gln Asp  
                     115                      120                      125  
 Tyr Lys Tyr Asp Ser Thr Ser Asp Asp Ser Asn Phe Leu Asn Pro Pro  
                     130                      135                      140  
 Arg Gly Trp Asp His Thr Ala Pro Gly His Arg Thr Phe Glu Thr Lys  
 145                      150                      155                      160  
 Asp Gln Pro Glu Tyr Asp Ser Thr Asp Gly Glu Gly Asp Trp Ser Leu  
                     165                      170                      175  
 Trp Ser Val Cys Ser Val Thr Cys Gly Asn Gly Asn Gln Lys Arg Thr  
                     180                      185                      190  
 Arg Ser Cys Gly Tyr Ala  
                     195

&lt;210&gt; 3373

&lt;211&gt; 726

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3373

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 gggtcctcga acagaagcca gggctctgtgc ggcacccacc agctgctggg ccatggcgga  
 120  
 gtgttctggt gcgggccagc gcctgaccgg tcggggcggc ctcaggagag gagagcttgc  
 180  
 tcagtgcgtc acgtagtcag ggctcaggct ggggcccggc tccagagcct ggtcacattc  
 240  
 ccaagcttca ttctcttcac ctgtgaattg caggcttccc tgggtgtgcc tgcacatgag  
 300  
 ggaagacaca cctgaagcac tgggtccctc catggccttg ggccgcagga accgtgggag  
 360  
 cactgagcttg ggaaggacat gtcggaggcc ggcgcctgtg cgggcagaag ctgtgtcctc  
 420  
 cagcccttcc accaccagca tgttctcatt tccaggtttc tctgtttaaa aaacaaaagt  
 480  
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 600  
 gtcttgggat cctgcagggg gagggggctg tgaatgtgcg ggttgtgtgt agacgtgggtg  
 660  
 tggatagctg tgtgggtgtg tgtgcaagt tagccatggt gtgggtagcc gtgtgggtat  
 720  
 atgcat  
 726

&lt;210&gt; 3374

<211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 3374  
 Met Ser Glu Ala Gly Ala Cys Ala Gly Arg Ser Cys Val Leu Gln Pro  
 1 5 10 15  
 Phe His His Gln His Val Leu Ile Ser Arg Phe Leu Cys Leu Lys Asn  
 20 25 30  
 Lys Ser Ser Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro  
 35 40 45  
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<210> 3375  
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 <212> DNA  
 <213> Homo sapiens

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<210> 3376  
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 <213> Homo sapiens

<400> 3376  
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&lt;210&gt; 3378

&lt;211&gt; 970

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3378

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Ala	Ser	Val	Ile	Gln	Phe	Gly	Lys	Ser	Ala	Lys	Arg	Thr	Pro	Glu	Ser
			20				25					30			
Thr	Gln	Ile	Gly	Gln	Tyr	Gly	Asn	Gly	Leu	Lys	Ser	Gly	Ser	Met	Arg
	35					40					45				
Ile	Gly	Lys	Asp	Phe	Ile	Leu	Phe	Thr	Lys	Lys	Glu	Asp	Thr	Met	Thr
	50				55						60				
Cys	Leu	Phe	Leu	Ser	Arg	Thr	Phe	His	Glu	Glu	Glu	Gly	Ile	Asp	Glu
65				70					75					80	
Val	Ile	Val	Pro	Leu	Pro	Thr	Trp	Asn	Ala	Arg	Thr	Arg	Glu	Pro	Val
			85					90						95	
Thr	Asp	Asn	Val	Glu	Lys	Phe	Ala	Ile	Glu	Thr	Glu	Leu	Ile	Tyr	Lys
	100						105					110			
Tyr	Ser	Pro	Phe	Arg	Thr	Glu	Glu	Glu	Val	Met	Thr	Gln	Phe	Met	Lys
	115					120					125				
Ile	Pro	Gly	Asp	Ser	Gly	Thr	Leu	Val	Ile	Ile	Phe	Asn	Leu	Lys	Leu
	130				135						140				
Met	Asp	Asn	Gly	Glu	Pro	Glu	Leu	Asp	Ile	Ile	Ser	Asn	Pro	Arg	Asp
145				150				155						160	
Ile	Gln	Met	Ala	Glu	Thr	Ser	Pro	Glu	Gly	Thr	Lys	Pro	Glu	Arg	Arg

2558

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Arg Pro Ala Pro Leu Val Gln Gln Leu Ser Pro Ser Leu Leu Pro Asn
  625              630              635              640
Ser Lys Ser Pro Arg Glu Val Pro Ser Pro Lys Val Ile Lys Thr Pro
      645              650              655
Val Val Lys Lys Thr Glu Ser Pro Ile Lys Leu Ser Pro Ala Thr Pro
      660              665              670
Ser Arg Lys Arg Ser Val Ala Val Ser Asp Glu Glu Val Glu Glu
  675              680              685
Glu Ala Glu Arg Arg Lys Glu Arg Cys Lys Arg Gly Arg Phe Val Val
  690              695              700
Lys Glu Glu Lys Lys Asp Ser Asn Glu Leu Ser Asp Ser Ala Gly Gly
  705              710              715              720
Glu Asp Ser Ala Asp Leu Lys Arg Ala Gln Lys Asp Lys Gly Leu His
      725              730              735
Val Glu Val Arg Val Asn Arg Glu Trp Tyr Thr Gly Arg Val Thr Ala
      740              745              750
Val Glu Val Gly Lys His Val Val Arg Trp Lys Val Lys Phe Asp Tyr
  755              760              765
Val Pro Thr Asp Thr Thr Pro Arg Asp Arg Trp Val Glu Lys Gly Ser
  770              775              780
Glu Asp Val Arg Leu Met Lys Pro Pro Ser Pro Glu His Gln Ser Leu
  785              790              795              800
Asp Thr Gln Gln Glu Gly Gly Glu Glu Glu Val Gly Pro Val Ala Gln
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Gln Ala Ile Ala Val Ala Glu Pro Ser Thr Ser Glu Cys Leu Arg Ile
      820              825              830
Glu Pro Asp Thr Thr Ala Leu Ser Thr Asn His Glu Thr Ile Asp Leu
  835              840              845
Leu Val Gln Ile Leu Arg Asn Cys Leu Arg Tyr Phe Leu Pro Pro Ser
  850              855              860
Phe Pro Ile Ser Lys Lys Gln Leu Ser Ala Met Asn Ser Asp Glu Leu
  865              870              875              880
Ile Ser Phe Pro Leu Lys Glu Tyr Phe Lys Gln Tyr Glu Val Gly Leu
      885              890              895
Gln Asn Leu Cys Asn Ser Tyr Gln Ser Arg Ala Asp Ser Arg Ala Lys
  900              905              910
Ala Ser Glu Glu Ser Leu Arg Thr Ser Glu Arg Lys Leu Arg Glu Thr
  915              920              925
Glu Glu Lys Leu Gln Lys Leu Arg Thr Asn Ile Val Ala Leu Leu Gln
  930              935              940
Lys Val Gln Glu Asp Ile Asp Ile Asn Thr Asp Asp Glu Leu Asp Ala
  945              950              955              960
Tyr Ile Glu Asp Leu Ile Thr Lys Gly Asp
      965              970

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&lt;210&gt; 3379

&lt;211&gt; 898

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3379

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 898

&lt;210&gt; 3380

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3380

Xaa	Ile	Trp	Ala	Glu	Thr	Arg	Leu	Val	Leu	Met	Ala	Thr	Asp	Arg	Gly
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Ser	Pro	Ala	Leu	Val	Gly	Ser	Ala	Thr	Leu	Thr	Val	Met	Val	Ile	Asp
			20					25					30		
Thr	Asn	Gly	Asn	Arg	Pro	Thr	Ile	Pro	Gln	Pro	Trp	Glu	Leu	Arg	Val
		35					40					45			
Ser	Glu	Asp	Ala	Leu	Leu	Gly	Ser	Glu	Ile	Ala	Gln	Val	Thr	Gly	Asn
	50					55					60				
Asp	Val	Asp	Ser	Gly	Pro	Val	Leu	Trp	Tyr	Val	Leu	Ser	Pro	Ser	Gly
65					70				75					80	
Pro	Gln	Asp	Pro	Phe	Ser	Val	Gly	Arg	Tyr	Gly	Gly	Arg	Val	Ser	Leu
			85					90					95		
Thr	Gly	Pro	Leu	Asp	Phe	Glu	Gln	Cys	Asp	Arg	Tyr	Gln	Leu	Gln	Leu
		100						105				110			
Leu	Ala	His	Asp	Gly	Pro	His	Glu	Gly	Arg	Ala	Xaa	Leu	Thr	Val	Leu
		115					120					125			
Val	Glu	Asp	Val	Asn	Asp	Asn	Ala	Pro	Ala	Phe	Ser	Gln	Ser	Leu	Tyr

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Gln Val Met Leu Leu Glu His Thr Pro Pro Gly Ser Ala Ile Leu Ser		
145	150	155
Val Ser Ala Thr Asp Arg Asp Ser Gly Ala Asn Gly His Ile Ser Tyr		160
	165	170
His Leu Ala Ser Pro Ala Asp Gly Phe Ser Val Asp Pro Asn Asn Gly		175
	180	185
Thr Leu Phe Thr Ile Val Gly Thr Leu Ala Leu Gly His Asp Gly Ser		190
	195	200
Gly Ala Val Asp Val Val Leu Glu Ala Arg Asp His Gly Ala Pro Val		205
	210	215
Arg Ala Ala Arg Ala Thr Val Asn Val Gln Leu Arg Asp Gln Asn Asp		220
225	230	235
His Ala Pro Ser Phe Thr Leu Phe His Tyr Arg Val Ala Val Thr Glu		240
	245	250
Asp Leu Pro Pro Gly Ser Thr Leu Leu Thr Leu Glu Ala Thr Asp Ala		255
	260	265
Asp Gly Ser Arg Ser His Ala Ala Val Asp Tyr Ser Ile Ile Ser Gly		270
	275	280
Asn Trp Gly Arg Val Phe Gln Leu Glu Pro Arg		285
	290	295

&lt;210&gt; 3381

&lt;211&gt; 1379

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3381

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&lt;210&gt; 3382

&lt;211&gt; 279

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3382

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			20					25					30		
Glu	Glu	Glu	Gln	Glu	Glu	Ser	Glu	Glu	Ala	Ala	Cys	Gly	Ser	Lys	Lys
			35					40					45		
Arg	Val	Val	Pro	Gly	Ile	Val	Tyr	Leu	Gly	His	Ile	Pro	Pro	Arg	Phe
	50					55					60				
Arg	Pro	Leu	His	Val	Arg	Asn	Leu	Leu	Ser	Ala	Tyr	Gly	Glu	Val	Gly
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Arg	Val	Phe	Phe	Gln	Ala	Glu	Asp	Arg	Phe	Val	Arg	Arg	Lys	Lys	Lys
				85					90					95	
Ala	Ala	Ala	Ala	Ala	Gly	Gly	Lys	Lys	Arg	Ser	Tyr	Thr	Lys	Asp	Tyr
				100				105					110		
Thr	Glu	Gly	Trp	Val	Glu	Phe	Arg	Asp	Lys	Arg	Ile	Ala	Lys	Arg	Val
			115					120					125		
Ala	Ala	Ser	Leu	His	Asn	Thr	Pro	Met	Gly	Ala	Arg	Arg	Arg	Ser	Pro
	130					135					140				
Phe	Arg	Tyr	Asp	Leu	Trp	Asn	Leu	Lys	Tyr	Leu	His	Arg	Phe	Thr	Trp
145				150						155				160	
Ser	His	Leu	Ser	Glu	His	Leu	Ala	Phe	Glu	Arg	Gln	Val	Arg	Arg	Gln
				165					170					175	
Arg	Leu	Arg	Ala	Glu	Val	Ala	Gln	Ala	Lys	Arg	Glu	Thr	Asp	Phe	Tyr
			180					185					190		
Leu	Gln	Ser	Val	Glu	Arg	Gly	Gln	Arg	Phe	Leu	Ala	Ala	Asp	Gly	Asp
			195				200					205			
Pro	Ala	Arg	Pro	Asp	Gly	Ser	Trp	Thr	Phe	Ala	Gln	Arg	Pro	Thr	Glu

210	215	220
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Ala Arg Leu Ala Thr Ala Gln Asp Lys Ala Arg Ser Asn Lys Gly Leu		240
	245	250
Leu Ala Arg Ile Phe Gly Ala Pro Pro Pro Ser Glu Ser Met Glu Gly		255
	260	265
Pro Ser Leu Val Arg Asp Ser		270
275		

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 <212> DNA  
 <213> Homo sapiens

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 180  
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 309

<210> 3384  
 <211> 94  
 <212> PRT  
 <213> Homo sapiens

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Asn Ala His Phe Leu Thr Ser Phe Val Leu Glu His Arg Ile Thr Ala
35 40 45
Asn Ala His Pro Trp Glu Leu Ser Cys Pro Arg Ser Pro Thr Gln Thr
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Leu Gln His Glu Arg Ala Arg Leu Asn Leu Lys Lys Lys Phe Arg
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Ala Pro Glu Gln Glu Leu Val Ser Ile Ile Asn Ser Glu Ser
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<210> 3385  
 <211> 720  
 <212> DNA  
 <213> Homo sapiens

<400> 3385

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 720

&lt;210&gt; 3386

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3386

Met	Val	Val	Lys	Thr	Val	Thr	Val	Arg	Gly	Trp	Gly	Ala	Leu	Arg	Ser
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Thr	Ser	Ser	Ala	Pro	His	Tyr	Pro	Gly	Ser	Phe	Arg	Val	Gly	Pro	Arg
		20					25					30			
Gln	Pro	Pro	Ala	Ser	Ala	Thr	Thr	Pro	Val	Pro	Leu	Ala	Arg	Phe	Phe
		35				40					45				
Val	Asn	Phe	Pro	Ser	Ala	Lys	Gln	Tyr	Phe	Ser	Gln	Phe	Lys	His	Met
	50					55				60					
Glu	Asp	Pro	Leu	Glu	Met	Glu	Arg	Ser	Pro	Gln	Leu	Arg	Lys	His	Ala
65				70				75					80		
Cys	Arg	Val	Met	Gly	Ala	Leu	Asn	Thr	Val	Val	Glu	Asn	Leu	His	Asp
		85					90						95		
Pro	Asp	Lys	Val	Ser	Ser	Val	Leu	Ala	Leu	Val	Gly	Lys	Ala	His	Ala
		100					105					110			
Leu	Lys	His	Lys	Val	Glu	Pro	Val	Tyr	Phe	Lys	Ile	Leu	Ser	Gly	Val
		115				120					125				
Ile	Leu	Glu	Val	Val	Ala	Glu	Glu	Phe	Ala	Ser	Asp	Phe	Pro	Pro	Glu
	130					135				140					
Thr	Gln	Arg	Ala	Trp	Ala	Lys	Leu	Arg	Gly	Leu	Ile	Tyr	Ser	His	Val
145				150					155					160	
Thr	Ala	Ala	Tyr	Lys	Glu	Val	Gly	Trp	Val	Gln	Gln	Val	Pro	Asn	Ala
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Thr	Thr	Pro	Pro	Ala	Thr	Leu	Pro	Ser	Ser	Gly	Pro				

180

185

&lt;210&gt; 3387

&lt;211&gt; 3299

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3387

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<210> 3388

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3388

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			20					25					30		
Leu	Arg	Val	Val	Leu	Ala	Leu	Arg	Gly	Arg	Glu	Glu	Val	Ser	Asp	Ala
			35				40					45			
Gly	Cys	Gly	Gly	Pro	Arg	Ile	Thr	Ile	Asn	Lys	Asp	Thr	Lys	Val	Pro
	50					55					60				
Asn	Ala	Cys	Leu	Phe	Thr	Ile	Asn	Lys	Glu	Asp	His	Thr	Leu	Gly	Asn
65					70					75				80	
Ile	Ile	Lys	Ser	Gln	Leu	Leu	Lys	Asp	Pro	Gln	Val	Leu	Phe	Ala	Gly
				85					90					95	
Tyr	Lys	Val	Pro	His	Pro	Leu	Glu	His	Lys	Ile	Ile	Ile	Arg	Val	Gln
			100					105					110		
Thr	Thr	Pro	Asp	Tyr	Ser	Pro	Gln	Glu	Ala	Phe	Thr	Asn	Ala	Ile	Thr
		115					120					125			
Asp	Leu	Ile	Ser	Glu	Leu	Ser	Leu	Leu	Glu	Glu	Arg	Phe	Arg	Val	Ala
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Ile	Lys	Asp	Lys	Gln	Glu	Gly	Ile	Glu							
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<210> 3389

<211> 308

<212> DNA

<213> Homo sapiens

<400> 3389

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308

<210> 3390  
<211> 102  
<212> PRT  
<213> Homo sapiens

<400> 3390  
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Thr Gln Lys His Pro Ser Ile Glu Asp Gly Pro Pro Phe Val Glu Pro  
35 40 45  
Leu Leu Asn Phe Ile Trp Phe Leu Leu Leu Ala Val Asp Gly Glu Pro  
50 55 60  
Ser Asp Gln Pro His Gly Leu Leu Arg Ala Gly Gly Trp Gly Gly Glu  
65 70 75 80  
Pro Gln Arg Arg Gln Pro His Arg Ala Gly Leu Asn Trp Pro Gly His  
85 90 95  
Val Glu Thr Pro Arg Ser  
100

<210> 3391  
<211> 1295  
<212> DNA  
<213> Homo sapiens

<400> 3391  
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 1295

&lt;210&gt; 3392

&lt;211&gt; 355

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3392

Ile	Val	Phe	Leu	Leu	Tyr	Leu	Glu	Thr	Cys	Leu	Glu	Val	Met	Asp	Asp
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Lys	Pro	Asn	Pro	Glu	Ala	Leu	Ser	Asp	Ser	Ser	Glu	Arg	Leu	Phe	Ser
			20					25					30		
Phe	Gly	Val	Ile	Ala	Asp	Val	Gln	Phe	Ala	Asp	Leu	Glu	Asp	Gly	Phe
		35				40					45				
Asn	Phe	Gln	Gly	Thr	Arg	Arg	Arg	Tyr	Tyr	Arg	His	Ser	Leu	Leu	His
	50			55						60					
Leu	Gln	Gly	Ala	Ile	Glu	Asp	Trp	Asn	Asn	Glu	Ser	Ser	Met	Pro	Cys
65				70						75				80	
Cys	Val	Leu	Gln	Leu	Gly	Asp	Ile	Ile	Asp	Gly	Tyr	Asn	Ala	Gln	Tyr
			85						90					95	
Asn	Ala	Ser	Lys	Lys	Ser	Leu	Glu	Leu	Val	Met	Asp	Met	Phe	Lys	Arg
			100					105					110		
Leu	Lys	Val	Pro	Val	His	His	Thr	Trp	Gly	Asn	His	Glu	Phe	Tyr	Asn
		115				120						125			
Phe	Ser	Arg	Glu	Tyr	Leu	Thr	His	Ser	Lys	Leu	Asn	Thr	Lys	Phe	Leu
	130				135						140				
Glu	Asp	Gln	Ile	Val	His	His	Pro	Glu	Thr	Met	Pro	Ser	Glu	Asp	Tyr
145				150						155				160	
Tyr	Ala	Tyr	His	Phe	Val	Pro	Phe	Pro	Lys	Phe	Arg	Phe	Ile	Leu	Leu
			165						170					175	
Asp	Ala	Tyr	Asp	Leu	Ser	Val	Leu	Gly	Val	Asp	Gln	Ser	Ser	Pro	Lys
		180						185				190			
Tyr	Glu	Gln	Cys	Met	Lys	Ile	Leu	Arg	Glu	His	Asn	Pro	Asn	Thr	Glu
		195					200					205			
Leu	Asn	Ser	Pro	Gln	Gly	Leu	Ser	Glu	Pro	Gln	Phe	Val	Gln	Phe	Asn

210	215	220
Gly Gly Phe Ser Gln Glu Gln Leu Asn Trp Leu Asn Glu Val Leu Thr		
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Phe Ser Asp Thr Asn Gln Glu Lys Val Val Ile Val Ser His Leu Pro		240
	245	250
Ile Tyr Pro Asp Ala Ser Asp Asn Val Cys Leu Ala Trp Asn Tyr Arg		255
	260	265
Asp Ala Leu Ala Val Ile Trp Ser His Glu Cys Val Val Cys Phe Phe		270
	275	280
Ala Gly His Thr His Asp Gly Gly Tyr Ser Glu Asp Pro Phe Gly Val		285
	290	295
Tyr His Val Asn Leu Glu Gly Val Ile Glu Thr Ala Pro Asp Ser Gln		300
305	310	315
Ala Phe Gly Thr Val His Val Tyr Pro Asp Lys Met Met Leu Lys Gly		320
	325	330
Arg Gly Arg Val Pro Asp Arg Ile Met Asn Tyr Lys Lys Glu Arg Ala		335
	340	345
Phe His Cys		350
355		

&lt;210&gt; 3393

&lt;211&gt; 510

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3393

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 510

&lt;210&gt; 3394

&lt;211&gt; 170

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3394

Xaa Arg Leu Trp Asp Pro Leu Gly Arg Gly Ser Ser Gly Gly Asp Val
1 5 10 15
Cys Arg Leu Gly Met Gly Pro Gly Xaa Val Thr Pro Ser Ser Phe Val

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Gly Val Trp	Ala Gly Ala Thr	Ala Ser Arg Gly	Gly Ser Asn Phe	Glu	
35	40	45			
Tyr Leu Lys	Arg Glu His Ser	Leu Ser Lys Pro	Tyr Gln Gly	Val Gly	
50	55	60			
Thr Gly Ser	Ser Ser Leu Trp	Asn Leu Met Gly	Asn Xaa Met	Val Met	
65	70	75	80		
Thr Gln Tyr	Ile Arg Leu Thr	Pro Asp Met Gln	Ser Lys Gln	Gly Ala	
	85	90	95		
Leu Trp Asn	Arg Val Pro Cys	Phe Leu Arg Asp	Trp Glu Leu	Gln Val	
	100	105	110		
His Phe Lys	Ile His Gly Gln	Gly Lys Lys Asn	Leu His Gly	Asp Gly	
	115	120	125		
Leu Ala Ile	Trp Tyr Thr Lys	Asp Arg Met Gln	Pro Gly Pro	Val Phe	
	130	135	140		
Gly Asn Met	Asp Lys Phe Val	Gly Leu Gly Val	Phe Val Asp	Thr Tyr	
145	150	155	160		
Pro Asn Glu	Glu Lys Gln Pro	Phe Thr Arg			
	165	170			

&lt;210&gt; 3395

&lt;211&gt; 807

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3395

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807

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<210> 3396  
 <211> 205  
 <212> PRT  
 <213> Homo sapiens

<400> 3396  
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 35 40 45  
 Glu Tyr Gln Ser Thr Ser Ala Ser Ala Ser Ala Ser Pro Phe Gln Ser  
 50 55 60  
 Ala Trp Tyr Ser Glu Ser Glu Ile Thr Gln Gly Ala Arg Ser Arg Ser  
 65 70 75 80  
 Gln Asn Gln Gln Arg Asp His Asp Ser Lys Arg Pro Lys Leu Ser Cys  
 85 90 95  
 Thr Asn Cys Thr Thr Ser Ala Gly Arg Asn Val Gly Asn Gly Leu Asn  
 100 105 110  
 Thr Leu Ser Asp Ser Ser Trp Arg His Ser Gln Val Pro Arg Ser Ser  
 115 120 125  
 Ser Met Val Leu Gly Ser Phe Gly Thr Asp Leu Met Arg Glu Arg Arg  
 130 135 140  
 Asp Leu Glu Arg Arg Thr Asp Ser Ser Ile Ser Asn Leu Met Asp Tyr  
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<211> 1069

<212> PRT

<213> Homo sapiens

<400> 3400

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Lys Thr Glu Pro Ser Ser Pro Leu Ser Asp Pro Ser Asp Ile Ile Arg
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Val Trp Thr His Cys Gln Thr Gln His Gly Ile Val Lys Asn Pro Ser
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Pro Ala Ser Ser Ser His Ala Val Leu Asp Glu Lys Phe Gln Arg Lys
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&lt;213&gt; Homo sapiens

&lt;400&gt; 3401

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&lt;210&gt; 3402

&lt;211&gt; 148

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3402

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Thr	Val	Gly	Lys	Leu	Cys	Arg	Leu	Ile	Asn	Glu	Asp	Val	Asn	Glu	Gln
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				85					90					95	
Leu	Glu	Glu	His	Glu	Glu	Phe	Phe	Pro	Ala	Phe	Gln	Ala	Phe	Thr	Asn
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Asp	Leu	Leu	Glu	Ile	Leu	Glu	Ile	Asp	Asp	Ser	Gly	Cys	His	Cys	Thr
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Cys	Ser	Lys	Glu	Ile	Lys	Ser	Thr	Phe	Ile	Leu	Lys	Thr	Asn	Gln	Ile
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&lt;210&gt; 3403

&lt;211&gt; 1696

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3403

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1500

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 1560  
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 1620  
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 1680  
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 1696

<210> 3404

<211> 286

<212> PRT

<213> Homo sapiens

<400> 3404

Met	Ala	Arg	Asn	Ala	Glu	Lys	Ala	Met	Thr	Ala	Leu	Ala	Arg	Phe	Arg
1			5					10					15		
Gln	Ala	Gln	Leu	Glu	Glu	Gly	Lys	Val	Lys	Glu	Arg	Arg	Pro	Phe	Leu
		20					25					30			
Ala	Ser	Glu	Cys	Thr	Glu	Leu	Pro	Lys	Ala	Glu	Lys	Trp	Arg	Arg	Gln
	35					40					45				
Ile	Ile	Gly	Glu	Ile	Ser	Lys	Lys	Val	Ala	Gln	Ile	Gln	Asn	Ala	Gly
50				55				60							
Leu	Gly	Glu	Phe	Arg	Ile	Arg	Asp	Leu	Asn	Asp	Glu	Ile	Asn	Lys	Leu
65				70				75					80		
Leu	Arg	Glu	Lys	Gly	His	Trp	Glu	Val	Arg	Ile	Lys	Glu	Leu	Gly	Gly
			85					90					95		
Pro	Asp	Tyr	Gly	Lys	Val	Gly	Pro	Lys	Met	Leu	Asp	His	Glu	Gly	Lys
		100					105					110			
Glu	Val	Pro	Gly	Asn	Arg	Gly	Tyr	Lys	Tyr	Phe	Gly	Ala	Ala	Lys	Asp
	115					120					125				
Leu	Pro	Gly	Val	Arg	Glu	Leu	Phe	Glu	Lys	Xaa	Thr	Ser	Ser	Ser	Ser
130						135					140				
Gln	Xaa	Lys	Thr	Arg	Ala	Glu	Leu	Met	Lys	Ala	Ile	Asp	Phe	Glu	Tyr
145				150						155				160	
Tyr	Gly	Tyr	Leu	Asp	Glu	Asp	Asp	Gly	Val	Ile	Val	Pro	Leu	Glu	Gln
			165					170					175		
Glu	Tyr	Glu	Lys	Lys	Leu	Arg	Ala	Glu	Leu	Val	Glu	Lys	Trp	Lys	Ala
		180						185					190		
Glu	Arg	Glu	Ala	Arg	Leu	Ala	Arg	Gly	Glu	Lys	Glu	Glu	Glu	Glu	Glu
	195					200					205				
Glu	Glu	Glu	Glu	Ile	Asn	Ile	Tyr	Ala	Val	Thr	Glu	Glu	Glu	Ser	Asp
210					215						220				
Glu	Glu	Gly	Ser	Gln	Glu	Lys	Gly	Gly	Asp	Asp	Ser	Gln	Gln	Lys	Phe
225				230					235					240	
Ile	Ala	His	Val	Pro	Val	Pro	Ser	Gln	Gln	Glu	Ile	Glu	Glu	Ala	Leu
			245					250					255		
Val	Arg	Arg	Lys	Lys	Met	Glu	Leu	Leu	Gln	Lys	Tyr	Ala	Ser	Glu	Thr
		260					265						270		
Leu	Gln	Ala	Gln	Ser	Glu	Glu	Ala	Arg	Arg	Leu	Leu	Gly	Tyr		
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<210> 3405

<211> 402

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3405

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agacaagctg gagacagcgc caagatgcgg cgctacgacg gggggcttaa aacactggaa
120
aacctgctcg cctccatccg taagggaat gccattgacg aagcggacat cccgccgcca
180
gtggccatag gaaaaggccc ggcgtccacg cctacctaca gccctgcacc caccagccg
240
gccctagaa tcgcgtcagc cccagagccc agggtcaccc tggagggacc ttctgccacc
300
gcccagcct catctccagg cttggctaag ccccagatgc ccccaggacc ctgcagccct
360
ccctctggcc cagttgcaga gccgccagcg cgactacaag ct
402

```

&lt;210&gt; 3406

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3406

```

Gly Trp Glu Ala Pro Leu Gln Glu Arg Leu Ala Phe Tyr Gln Thr Ala
1          5          10          15
Ile Glu Ser Ala Arg Gln Ala Gly Asp Ser Ala Lys Met Arg Arg Tyr
20        25        30
Asp Arg Gly Leu Lys Thr Leu Glu Asn Leu Leu Ala Ser Ile Arg Lys
35        40        45
Gly Asn Ala Ile Asp Glu Ala Asp Ile Pro Pro Pro Val Ala Ile Gly
50        55        60
Lys Gly Pro Ala Ser Thr Pro Thr Tyr Ser Pro Ala Pro Thr Gln Pro
65        70        75        80
Ala Pro Arg Ile Ala Ser Ala Pro Glu Pro Arg Val Thr Leu Glu Gly
85        90        95
Pro Ser Ala Thr Ala Pro Ala Ser Ser Pro Gly Leu Ala Lys Pro Gln
100       105       110
Met Pro Pro Gly Pro Cys Ser Pro Pro Ser Gly Pro Val Ala Glu Pro
115       120       125
Pro Ala Arg Leu Gln Ala
130

```

&lt;210&gt; 3407

&lt;211&gt; 535

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3407

```

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60
tttcccggac accatgcctt ctcggcggtg aggcagggtg cggcaccgac aggcccgggg
120

```

gggacctttc ccggacaccc aacctcctcg gtggcgaggc aggtggcggc accgacaggc  
 180  
 ccggcgggga cctttcccg ancacctggc ctcttgga agcaggtggc ggcaccaaca  
 240  
 ggcccgggg ggacctttcc cggacacctg gcctcctcg cgaggcaggt ggcagaactg  
 300  
 gttccacgtc tgatcttct tagacaaacc tgccttcaga ggaaattgtg ttcaactgga  
 360  
 gaaactggaa aatgtactag atattggctg atatgaagga tatatgtttt aagtatgata  
 420  
 attcgatttt ggctctgtag ggaaaggctc ttattttaaa aagatgtgca ctagagaaaa  
 480  
 aggaaacagc atgtagcaaa tacatccacg gatgtcctcc tggtttaaaa aaaaa  
 535

&lt;210&gt; 3408

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3408

Gly	Met	Arg	Gly	Asp	Gly	Glu	Glu	Pro	Pro	Arg	Thr	Ala	Pro	Ser	Arg
1				5					10					15	
Ser	Ala	Gly	Thr	Phe	Pro	Gly	His	His	Ala	Phe	Ser	Ala	Val	Arg	Gln
			20				25						30		
Val	Ala	Ala	Pro	Thr	Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Pro	Thr
		35					40					45			
Ser	Ser	Val	Ala	Arg	Gln	Val	Ala	Ala	Pro	Thr	Gly	Pro	Ala	Gly	Thr
	50				55						60				
Phe	Pro	Gly	Xaa	Pro	Gly	Leu	Leu	Gly	Lys	Gln	Val	Ala	Ala	Pro	Thr
65					70				75					80	
Gly	Pro	Gly	Gly	Thr	Phe	Pro	Gly	His	Leu	Ala	Ser	Ser	Ala	Arg	Gln
				85				90					95		
Val	Ala	Glu	Leu	Val	Pro	Arg	Leu	Ile	Phe	Leu	Arg	Gln	Thr	Cys	Leu
			100				105					110			
Gln	Arg	Lys	Leu	Cys	Ser	Thr	Gly	Glu	Thr	Gly	Lys	Cys	Thr	Arg	Tyr
		115					120					125			
Trp	Leu	Ile													
		130													

&lt;210&gt; 3409

&lt;211&gt; 959

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3409

nagatctccg aggacaccgg acgggagcgc ttggccatcc tctctccggc agaggagcag  
 60  
 acgtttgctt tccaagtgca aaactacaga cacgcgcgcg cacacacgca agcacacgcg  
 120  
 gagagagagg aaccttgccg gtccgaggca gctctgcgcg tccccctctg cgcttagcat  
 180  
 cctcggccca gcgcggcccg caccgccatg gaggtgctgg agagcgggga gcagggcgtg  
 240

ctgcagtggg accgcaagct gagcgagctg tcagagcccc gggacggcga ggcctcatg  
 300  
 taccacacgc acttctcaga acttctggat gagttttccc agaacgtctt gggtcagctc  
 360  
 ctgaatgata ctttcctctc agagaagagt gtgtcaatgg aggtggaacc ttccccgacg  
 420  
 tccccggcgc ctctcatcca ggctgagcac agctactccc tgtgcgagga gcctcggggc  
 480  
 cagtcgccct tcacccacat taccaccagt gacagcttca atgacgatga ggtggaaagt  
 540  
 nngagaaatg gtacctgtct acagacttcc cttcaacatc catcaagaca gagccagtta  
 600  
 cagacgaacc acccccagga ctcggtccgt ctgtcactct gaccatcaca gccatctcca  
 660  
 ccncggttg aaaaggagga acctcctctg gaaatgaaca ctgggggtga ttctctgtgc  
 720  
 cagaccatta ttctataaat taagctggag cctcatgaag tggatcagtt tctaaacttc  
 780  
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 840  
 tgggtctaca gagagggaaat atggcgagag agctgggatg agtttgtacc acagatgttg  
 900  
 tagctggctt tatgaaatag ctctgttctt aaaaaataaa aattttgctt ccaaataaa  
 959

&lt;210&gt; 3410

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3410

Met	Glu	Val	Leu	Glu	Ser	Gly	Glu	Gln	Gly	Val	Leu	Gln	Trp	Asp	Arg
1				5					10					15	
Lys	Leu	Ser	Glu	Leu	Ser	Glu	Pro	Gly	Asp	Gly	Glu	Ala	Leu	Met	Tyr
			20					25					30		
His	Thr	His	Phe	Ser	Glu	Leu	Leu	Asp	Glu	Phe	Ser	Gln	Asn	Val	Leu
			35				40					45			
Gly	Gln	Leu	Leu	Asn	Asp	Pro	Phe	Leu	Ser	Glu	Lys	Ser	Val	Ser	Met
			50			55				60					
Glu	Val	Glu	Pro	Ser	Pro	Thr	Ser	Pro	Ala	Pro	Leu	Ile	Gln	Ala	Glu
					70				75					80	
His	Ser	Tyr	Ser	Leu	Cys	Glu	Glu	Pro	Arg	Ala	Gln	Ser	Pro	Phe	Thr
				85				90					95		
His	Ile	Thr	Thr	Ser	Asp	Ser	Phe	Asn	Asp	Asp	Glu	Val	Glu	Ser	Xaa
			100					105					110		
Arg	Asn	Gly	Thr	Cys	Leu	Gln	Thr	Ser	Leu	Gln	His	Pro	Ser	Arg	Gln
			115				120					125			
Ser	Gln	Leu	Gln	Thr	Asn	His	Pro	Gln	Asp	Ser	Phe	Arg	Leu	Ser	Leu
			130			135						140			

&lt;210&gt; 3411

&lt;211&gt; 958

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3411

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 ggccggccgt tgtgccctca tccctccac ccttccttcg tatagettcc tttctcctca  
 120  
 cgacggcctc cacagtccgg agcccgggc agcccgacc tggcggggag agctgcctcc  
 180  
 acggccgggc acccagaccc caccgtcgca gtcgccacca cctcagtcca tccttggtac  
 240  
 cggcaatggg cttcgtatcc tccagtgcac ttgtaactga cttggacacg gaataactaa  
 300  
 aactcacttc tgtcctcacc ccagtcgcgc cggcgggtgac catctcggct cttttgggct  
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 420  
 gagattcctg tgaccctcat cattaaagca ccgaatcaga aatacagtga ccagactatt  
 480  
 agctgcttct tgaactggac cgtggggaaa ctaaaaacgc atctatctaa cgtttacctt  
 540  
 agcaaaccat tgacgaagga tcagagattg gtgtattcgg gcagactgct tcccgatcat  
 600  
 ctgcagctga aagacattct cagaaaacaa gatgagtatc atatggttca tctagtatgt  
 660  
 acttctcgga ctctcccccag ttctccaaaa tccagcacca atagagaaag tcatgaagca  
 720  
 ttggcatcca gcagcaattc tagttcagat cattcaggat caacaactcc atcatctggt  
 780  
 caagaaacct tgtcttttagc tgtgggttct tcctcagaag gattgaggca gcgtaccctt  
 840  
 ccacaagcac aaactgacca agcacagagt caccagtttc catatgtaat gcaaggaaat  
 900  
 gtagacaacc aatttcctgg gcaagctgct ccacctggat tcccagtga tcccgcgg  
 958

&lt;210&gt; 3412

&lt;211&gt; 185

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3412

Met Asp Gln Ser Gly Met Glu Ile Pro Val Thr Leu Ile Ile Lys Ala  
 1 5 10 15  
 Pro Asn Gln Lys Tyr Ser Asp Gln Thr Ile Ser Cys Phe Leu Asn Trp  
 20 25 30  
 Thr Val Gly Lys Leu Lys Thr His Leu Ser Asn Val Tyr Pro Ser Lys  
 35 40 45  
 Pro Leu Thr Lys Asp Gln Arg Leu Val Tyr Ser Gly Arg Leu Leu Pro  
 50 55 60  
 Asp His Leu Gln Leu Lys Asp Ile Leu Arg Lys Gln Asp Glu Tyr His  
 65 70 75 80  
 Met Val His Leu Val Cys Thr Ser Arg Thr Pro Pro Ser Ser Pro Lys  
 85 90 95  
 Ser Ser Thr Asn Arg Glu Ser His Glu Ala Leu Ala Ser Ser Ser Asn

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<400> 3413
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120
tgtgtcttta aagatattag agaagtggga gctgttgccc caaaactggt ttcttatgta
180
gtactgaag gaacagaaag caggaagaaa gaaaaaagtt agttgtggcc ccagaagagt
240
tgtttttcaa atgccgagcc gtgaagcctc atgcactcaa cacaaagttt ttctttcata
300
tagataagcc tgaagaaaaa agaataagcc tgagtatgta ttttaggtgt ccaactatcc
360
attaccaaga agaaatctat tcgtttgagc ctgagacact ctttgaggta aaaaattaga
420
atgaagaac ctttggatgg tgaatgtggc aaagcagtggt taccacagca ggagcttctg
480
gacaaaatta aagaagaacc agacaatgct caagagtatg gatgtgtcca acagccaaaa
540
actcaagaaa gtaaattgaa aattggtggt gtgtcttcag ttaatgagag acctattgcc
600
cagcagttga acccaggctt tcagctttct tttgcatcat ctggccaag tgtgttgctt
660
ccttcagttc cagctgttgc tattaagggt ttttgttctg gttgtaaaaa aatgctttat
720
aagggccaaa ctgcatatca taagacagga tctactcagc tcttctgctc cacacgatgc
780
atcaccagac attcttcacc tgcttgcttg ccacctctc ccaagaaaac ctgcacaaac
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900
cctagcaaag atttctgcag ccaatcatgc ttgtcatctt atgagctaaa gaaaaaacct
960
gttgttacca tatataccaa aagcatttca actaagtgcg gtatgtgtca gaagaatgct
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gatactcgat ttgaagttaa atatcaaaat gtggtacatg gtctttgtag tgatgcctgt
1080

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1200  
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1260  
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1320  
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1380  
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1560  
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1620  
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1680  
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1740  
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1800  
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1860  
gtaaaggaga ctgttcgggtt ctcaggtgct gacaagtcac tctgtagtga aggttgcaaa  
1920  
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1980  
tgttcacaga catcccaaaa tttggtacag aatcgattgg agggcaagtt agaagagttt  
2040  
tgttgtgaag attgtatgtc caaatttaca gttctgtttt atcagatggc caagtgtgat  
2100  
ggttgtaaac gacagggtaa actaagcgag tccataaagt ggcgaggcaa cattaaacat  
2160  
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2220  
ccacaaaata aagtaaatat ttctaaagca aaaactgctg tgacggagct cccttctgca  
2280  
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2340  
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2460  
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2520  
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2580  
gcagtttgct gaggtgttcc cgctgaaggt atttggttac cagccagatc ccctgaacta  
2640  
ccaaatagct gtgggctttc tggaactgct ggctgggttg ctgctgggtca tgggccacc  
2700

gatgtgcaa gagatcagta acttgttctt gattctgctc atgatggggg ctatcttcac  
 2760  
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 3180  
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 3240  
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 3300  
 ctccttttaa aaccttataa actataaac tgtaaaaaaa aaaa  
 3344

&lt;210&gt; 3414

&lt;211&gt; 723

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3414

Met	Lys	Glu	Pro	Leu	Asp	Gly	Glu	Cys	Gly	Lys	Ala	Val	Val	Pro	Gln
1				5				10						15	
Gln	Glu	Leu	Leu	Asp	Lys	Ile	Lys	Glu	Glu	Pro	Asp	Asn	Ala	Gln	Glu
		20					25					30			
Tyr	Gly	Cys	Val	Gln	Gln	Pro	Lys	Thr	Gln	Glu	Ser	Lys	Leu	Lys	Ile
	35					40					45				
Gly	Gly	Val	Ser	Ser	Val	Asn	Glu	Arg	Pro	Ile	Ala	Gln	Gln	Leu	Asn
	50				55				60						
Pro	Gly	Phe	Gln	Leu	Ser	Phe	Ala	Ser	Ser	Gly	Pro	Ser	Val	Leu	Leu
65				70				75						80	
Pro	Ser	Val	Pro	Ala	Val	Ala	Ile	Lys	Val	Phe	Cys	Ser	Gly	Cys	Lys
			85					90					95		
Lys	Met	Leu	Tyr	Lys	Gly	Gln	Thr	Ala	Tyr	His	Lys	Thr	Gly	Ser	Thr
	100						105						110		
Gln	Leu	Phe	Cys	Ser	Thr	Arg	Cys	Ile	Thr	Arg	His	Ser	Ser	Pro	Ala
	115					120						125			
Cys	Leu	Pro	Pro	Pro	Pro	Lys	Lys	Thr	Cys	Thr	Asn	Cys	Ser	Lys	Asp
	130					135					140				
Ile	Leu	Asn	Pro	Lys	Asp	Val	Ile	Thr	Thr	Arg	Phe	Glu	Asn	Ser	Tyr
145				150					155					160	
Pro	Ser	Lys	Asp	Phe	Cys	Ser	Gln	Ser	Cys	Leu	Ser	Ser	Tyr	Glu	Leu
			165					170					175		
Lys	Lys	Lys	Pro	Val	Val	Thr	Ile	Tyr	Thr	Lys	Ser	Ile	Ser	Thr	Lys
			180					185					190		
Cys	Ser	Met	Cys	Gln	Lys	Asn	Ala	Asp	Thr	Arg	Phe	Glu	Val	Lys	Tyr

195					200					205						
Gln	Asn	Val	Val	His	Gly	Leu	Cys	Ser	Asp	Ala	Cys	Phe	Ser	Lys	Phe	
210					215					220						
His	Ser	Thr	Asn	Asn	Leu	Thr	Thr	Asn	Cys	Cys	Glu	Asn	Cys	Gly	Ser	
225					230					235					240	
Tyr	Cys	Tyr	Ser	Ser	Ser	Gly	Pro	Cys	Gln	Ser	Gln	Lys	Val	Phe	Ser	
245					250					255						
Ser	Thr	Ser	Val	Thr	Ala	Tyr	Lys	Gln	Asn	Ser	Ala	Gln	Ile	Pro	Pro	
260					265					270						
Tyr	Ala	Leu	Gly	Lys	Ser	Leu	Arg	Ser	Ser	Ala	Glu	Met	Ile	Glu	Asn	
275					280					285						
Thr	Asn	Ser	Leu	Gly	Lys	Thr	Glu	Leu	Phe	Cys	Ser	Ile	Asn	Cys	Leu	
290					295					300						
Ser	Ala	Tyr	Arg	Val	Lys	Thr	Val	Thr	Ser	Ala	Gly	Val	Gln	Val	Ser	
305					310					315					320	
Cys	His	Ser	Cys	Lys	Thr	Ser	Ala	Ile	Pro	Gln	Tyr	His	Leu	Ala	Met	
325					330					335						
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&lt;210&gt; 3415

&lt;211&gt; 3501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3415

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&lt;210&gt; 3416

&lt;211&gt; 259

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3416

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Leu Gln Cys Leu Phe Gln Arg Lys Gly Ser Met Thr Met Ser Ile Gln
      180              185              190
Trp Lys Thr Arg Gln Leu Gln Ser Lys Leu His Glu Ala Asp Ile Val
      195              200              205
Val Leu Gly Ser Pro Lys Pro Glu Glu Ile Pro Leu Thr Trp Ile Gln
      210              215              220
Pro Gly Thr Thr Val Leu Asn Cys Ser His Asp Phe Leu Ser Gly Lys
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 <212> DNA  
 <213> Homo sapiens

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<210> 3418  
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 <212> PRT  
 <213> Homo sapiens

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35      40      45
Asp Val Val Lys Ile Thr Ile Asp Trp Asn Lys Leu Gln Ser Leu Ser
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Ala Phe Gln Pro Ala Leu Leu Phe Ser Ala Leu Glu Gln His Ile Leu

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&lt;210&gt; 3422

&lt;211&gt; 418

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3422

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3423

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 <212> PRT  
 <213> Homo sapiens

<400> 3424  
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 Ala Ser Tyr Gly Val Arg Gln Asp Gly Asp Pro Ala Phe Leu Tyr Leu  
 35 40 45  
 Leu Ser Ala Pro Arg Glu Ala Pro Ala Thr Gly Pro Ser Pro Gln His  
 50 55 60  
 Pro Gln Lys Met Asp Gly Glu Leu Gly Arg Leu Phe Pro Pro Ser Leu  
 65 70 75 80  
 Gly Leu Pro Pro Gly Pro Gln Pro Ala Ala Ser Ser Leu Pro Ser Pro  
 85 90 95  
 Leu Gln Pro Ser Trp Ser Cys Pro Ser Cys Thr Phe Ile Asn Ala Pro  
 100 105 110  
 Asp Arg Pro Gly Cys Glu Met Cys Ser Thr Gln Arg Pro Cys Thr Trp  
 115 120 125  
 Asp Pro Leu Ala Ala Ala Ser Thr  
 130 135

<210> 3425  
 <211> 1416  
 <212> DNA  
 <213> Homo sapiens

<400> 3425  
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 120  
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 180  
 ccgcgtcaca gcacccacat ggctcttgga gtgggcgcgg ccttcgagga actgcctcac  
 240  
 gacggcacgt gtgacgagtg cgagcccgac gaggctccgg gggccgagga agtgtgccga  
 300

gaatgcggct tctgctactg ccgccgccat gccgaggcgc acaggcagaa gttcctcagt  
 360  
 caccatctgg ccgaatacgt ccacggctcc caggcctgga ccccgccagc tgacggagag  
 420  
 ggggcgggga aggaagaagc ggaggtcaag gtggagcagg agaggagat agaaagcgag  
 480  
 gcagggaag agagtgagtc ggaggaagag agcgagtcag aggaagagag cgagacagag  
 540  
 gaagagagtg aggatgagag cgatgaggag agtgaagaag acagcgagga agaaatggag  
 600  
 gatgagcaag aaagcgaggc cgaagaagac aaccaagaag aaggggaatc cgaggcggag  
 660  
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 720  
 gccaaagga agtgtccgga ccatgggctt gatttgagta cctattgcca ggaagatagg  
 780  
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 1080  
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 1200  
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 1320  
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 1416

<210> 3426

<211> 410

<212> PRT

<213> Homo sapiens

<400> 3426

Ser	Gly	Gly	Lys	Gly	Leu	Cys	Cys	Cys	Ala	Arg	Ala	Gly	Ala	Ala	Ala
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Ala	Pro	Gly	Pro	Ala	Ser	Arg	Arg	Gly	Ala	Val	Gln	Ala	Gly	Gly	Asp
			20					25				30			
Ser	Leu	Gly	Arg	Asp	Pro	Gly	Arg	Glu	Glu	Glu	Val	Arg	Pro	Arg	Gly
		35				40					45				
Arg	Lys	Ala	Ala	Ser	Pro	Gly	Ala	Pro	Arg	Pro	Trp	Pro	Arg	His	Ser
	50					55					60				
Thr	His	Met	Ala	Ser	Gly	Val	Gly	Ala	Ala	Phe	Glu	Glu	Leu	Pro	His

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65          70          75          80
Asp Gly Thr Cys Asp Glu Cys Glu Pro Asp Glu Ala Pro Gly Ala Glu
      85          90          95
Glu Val Cys Arg Glu Cys Gly Phe Cys Tyr Cys Arg Arg His Ala Glu
      100         105         110
Ala His Arg Gln Lys Phe Leu Ser His His Leu Ala Glu Tyr Val His
      115         120         125
Gly Ser Gln Ala Trp Thr Pro Pro Ala Asp Gly Glu Gly Ala Gly Lys
      130         135         140
Glu Glu Ala Glu Val Lys Val Glu Gln Glu Arg Glu Ile Glu Ser Glu
145         150         155         160
Ala Gly Glu Glu Ser Glu Ser Glu Glu Glu Ser Glu Ser Glu Glu Glu
      165         170         175
Ser Glu Thr Glu Glu Glu Ser Glu Asp Glu Ser Asp Glu Glu Ser Glu
      180         185         190
Glu Asp Ser Glu Glu Glu Met Glu Asp Glu Gln Glu Ser Glu Ala Glu
      195         200         205
Glu Asp Asn Gln Glu Glu Gly Glu Ser Glu Ala Glu Gly Glu Thr Glu
      210         215         220
Ala Glu Ser Glu Phe Asp Pro Glu Ile Glu Met Glu Ala Glu Arg Val
225         230         235         240
Ala Lys Arg Lys Cys Pro Asp His Gly Leu Asp Leu Ser Thr Tyr Cys
      245         250         255
Gln Glu Asp Arg Gln Leu Ile Cys Val Leu Cys Pro Val Ile Gly Ala
      260         265         270
His Gln Gly His Gln Leu Ser Thr Leu Asp Glu Ala Phe Glu Glu Leu
      275         280         285
Arg Ser Lys Asp Ser Gly Gly Leu Lys Ala Ala Met Ile Glu Leu Val
      290         295         300
Glu Arg Leu Lys Phe Lys Ser Ser Asp Pro Lys Val Thr Arg Asp Gln
305         310         315         320
Met Lys Met Phe Ile Gln Gln Glu Phe Lys Lys Val Gln Lys Val Ile
      325         330         335
Ala Asp Glu Glu Gln Lys Ala Leu His Leu Val Asp Ile Gln Glu Ala
      340         345         350
Met Ala Thr Ala His Val Thr Glu Ile Leu Ala Asp Ile Gln Ser His
      355         360         365
Met Asp Arg Leu Met Thr Gln Met Ala Gln Ala Lys Glu Gln Leu Asp
      370         375         380
Thr Ser Asn Glu Ser Ala Glu Pro Lys Ala Glu Gly Asp Glu Glu Gly
385         390         395         400
Pro Ser Gly Ala Ser Glu Glu Glu Asp Thr
      405         410

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&lt;210&gt; 3427

&lt;211&gt; 580

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3427

ggatccccctc tcttcaaaat tgtagacgcg tctccgagtc ctttcactca tcggaggctg

60

ccggatttca atgtcatagt tccattgtc aatgacatca tcggagaact tgacctgctg

120

gggctctggat tgagacttgg accttctgag cactggcaga tgtactggct tctcttcagg  
 180  
 caggattttc tctggacaca actctgaact tagactcttt aaggactctg cactcctgtg  
 240  
 cagcatggaa gagttcaaag ttcccatatt gctcatcttc tcacaatctt ctgtttccat  
 300  
 ctcttcaaaa ttttgcagag aatacaatga tggccttggc ttgttttctc catccaccga  
 360  
 agcccctgtg atattggaca atgccaaaga atccatcgaa tcccgaacac tttgctctgg  
 420  
 tttcaggtct gacagacact ccagggaatc ttcataccac tgtgtttcat catgattata  
 480  
 ccctgaagcc ccattggtcca gttccaattc ctgaagcctt ctactgcttg cagggcctgg  
 540  
 gtggctgcc taagcagaat cgcccagtc atcttgtgac  
 580

&lt;210&gt; 3428

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3428

Met	Asp	Ser	Leu	Ala	Leu	Ser	Asn	Ile	Thr	Gly	Ala	Ser	Val	Asp	Gly
1				5					10					15	
Glu	Asn	Lys	Pro	Arg	Pro	Ser	Leu	Tyr	Ser	Leu	Gln	Asn	Phe	Glu	Glu
			20					25					30		
Met	Glu	Thr	Glu	Asp	Cys	Glu	Lys	Met	Ser	Asn	Met	Gly	Thr	Leu	Asn
		35					40					45			
Ser	Ser	Met	Leu	His	Arg	Ser	Ala	Glu	Ser	Leu	Lys	Ser	Leu	Ser	Ser
		50				55					60				
Glu	Leu	Cys	Pro	Glu	Lys	Ile	Leu	Pro	Glu	Glu	Lys	Pro	Val	His	Leu
65					70				75					80	
Pro	Val	Leu	Arg	Arg	Ser	Lys	Ser	Gln	Ser	Arg	Pro	Gln	Gln	Val	Lys
			85					90					95		
Phe	Ser	Asp	Asp	Val	Ile	Asp	Asn	Gly	Asn	Tyr	Asp	Ile	Glu	Ile	Arg
		100					105					110			
Gln	Pro	Pro	Met	Ser	Glu	Arg	Thr	Arg	Arg	Arg	Val	Tyr	Asn	Phe	Glu
		115					120					125			
Glu	Arg	Gly	Ser												
		130													

&lt;210&gt; 3429

&lt;211&gt; 634

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3429

cccggggggc tgggagggga ggcacagtct ggtctgcact gaggtaggcc gccgtggaga  
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 agggaagggga gccggcagct ggatgtggca ggatgatttc tcctgagagt agccctcgcg  
 120  
 gtcagcttcc ttttcatact ttcccggcgt tctctccacg agcagggtgca ccagggaacct  
 180

gtccctctgt cctacacggt caccacagtg acgacccaag gcttcccctt gcctacaggc  
 240  
 cagcacatcc ctggctgcag tgcccagcag ctcccagcat gctccgtgat gttcagtggg  
 300  
 cagcattacc ccctctgctg cctcccgccc ccgcttatcc aggcggtcac catgcagcag  
 360  
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 420  
 cccccaccac cgggcacaca cccagcagct ccagggtctg tataagaaac cctgtggaag  
 480  
 gcccatccct gtcctaggcc acccaggcag gacactccac tgtaaggcc cacagcctca  
 540  
 actcctgggc ctctgccaag ctgtgaggca ggtacagggg tactggaagg ttcctgaacc  
 600  
 ttgaaacact ctattaccaa atgtgaacac gcgt  
 634

&lt;210&gt; 3430

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3430

Phe	Leu	Leu	Arg	Val	Ala	Leu	Ala	Val	Ser	Phe	Leu	Phe	Ile	Leu	Ser
1			5					10					15		
Arg	Arg	Ser	Leu	His	Glu	Gln	Val	His	Gln	Gly	Pro	Val	Pro	Leu	Ser
		20					25					30			
Tyr	Thr	Val	Thr	Thr	Val	Thr	Thr	Gln	Gly	Phe	Pro	Leu	Pro	Thr	Gly
	35				40					45					
Gln	His	Ile	Pro	Gly	Cys	Ser	Ala	Gln	Gln	Leu	Pro	Ala	Cys	Ser	Val
	50				55					60					
Met	Phe	Ser	Gly	Gln	His	Tyr	Pro	Leu	Cys	Cys	Leu	Pro	Pro	Pro	Leu
65					70					75					80
Ile	Gln	Ala	Cys	Thr	Met	Gln	Gln	Leu	Pro	Val	Pro	Tyr	Gln	Ala	Tyr
			85					90					95		
Pro	His	Leu	Ile	Ser	Ser	Asp	His	Tyr	Ile	Leu	His	Pro	Pro	Pro	Pro
		100					105					110			
Gly	Thr	His	Pro	Ala	Ala	Pro	Gly	Ser	Val						
		115					120								

&lt;210&gt; 3431

&lt;211&gt; 1396

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3431

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 60  
 ccattctcac gctggcgccc ccgctgcatt gccactacgg ggccttcccc cctaatgcct  
 120  
 ctgcgtggga gcagcgtccc aatgccagcg cgtcacgtcg ccagcgtgc cctagcacgc  
 180  
 agcgccgcca gccgtgtcgc caacagtacc aaatcgtcgt gcagcggctt cgccccgccg  
 240

gacttcaacc attgcctcaa ggattgggac tataatggcc ttcctgtgct caccaccaac  
 300  
 gccatcggcc agtgggatct ggtgtgtgac ctgggctggc aggtgatcct ggagcagatc  
 360  
 ctcttcacatc tgggctttgc ctccggctac ctgttcctgg gttaccccg agacagattt  
 420  
 ggccgtcgcg ggattgtgct gctgaccttg gggctggtgg gccctgtgg agtaggaggg  
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 540  
 gccggtgttg acctgggtgt ctacctgatg cgctggagc tgtgcgaccc aaccagagg  
 600  
 cttcgggtgg ccctggcagg ggagtgtgtg ggggtgggag ggcacttct gttcctgggc  
 660  
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 720  
 ctcttctgt tttatggctg gcctggtttg ttcctggagt cgcacggtg gctgatagt  
 780  
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 aaaaatctgc ttatctggg cttcaccaac ttcattgccc atgccattcg cactgctac  
 1020  
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 1260  
 gatctgaacg aggctgccat caccactttc tctgtccttg ggctcttctc ctccaaagt  
 1320  
 gccgccatcc tcagcacct ccttgctgct gaggtcatcc ccaccactgt ccggggccgt  
 1380  
 ggctggggcc tgatca  
 1396

&lt;210&gt; 3432

&lt;211&gt; 296

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3432

Met Ala Leu Arg Phe Leu Leu Gly Phe Leu Leu Ala Gly Val Asp Leu  
 1 5 10 15  
 Gly Val Tyr Leu Met Arg Leu Glu Leu Cys Asp Pro Thr Gln Arg Leu  
 20 25 30  
 Arg Val Ala Leu Ala Gly Glu Leu Val Gly Val Gly Gly His Phe Leu  
 35 40 45  
 Phe Leu Gly Leu Ala Leu Val Ser Lys Asp Trp Arg Phe Leu Gln Arg

50	55	60
Met Ile Thr Ala Pro Cys Ile Leu Phe Leu Phe Tyr Gly Trp Pro Gly		
65	70	75
Leu Phe Leu Glu Ser Ala Arg Trp Leu Ile Val Lys Arg Gln Ile Glu		80
	85	90
Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His		95
	100	105
Gly Gln Met Leu Gly Glu Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu		110
	115	120
Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu		125
	130	135
Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr		140
145	150	155
Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly		160
	165	170
Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly		175
	180	185
Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe		190
	195	200
Gly Arg Arg Gly Ile Leu Leu Leu Ser Met Thr Leu Thr Gly Ile Ala		205
	210	215
Ser Leu Val Leu Leu Gly Leu Trp Asp Cys Glu His Pro Ile Phe Pro		220
225	230	235
Thr Val Trp Ala Gln Gln Gly Asn Pro Asn Arg Asp Leu Asn Glu Ala		240
	245	250
Ala Ile Thr Thr Phe Ser Val Leu Gly Leu Phe Ser Ser Gln Ala Ala		255
	260	265
Ala Ile Leu Ser Thr Leu Leu Ala Ala Glu Val Ile Pro Thr Thr Val		270
	275	280
Arg Gly Arg Gly Leu Gly Leu Ile		285
290	295	

&lt;210&gt; 3433

&lt;211&gt; 1257

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3433

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 120  
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 180  
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 240  
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 480

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 780  
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 900  
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 960  
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 1200  
 cacggcgggc ccgctccatc ggcccagaaa cagcgacggg ggctttgtcc cacgcgt  
 1257

&lt;210&gt; 3434

&lt;211&gt; 311

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3434

Ala Thr Arg Gly Ala Gly Pro Gln Gln Arg Leu Leu Pro Ser Ala Gln  
 1 5 10 15  
 Arg Pro Ser Ser Val Pro Pro Ser Pro Ser Pro Arg Pro Leu Pro Gly  
 20 25 30  
 Gly Arg Gln Arg Pro Gln Arg Pro Ser His Ser Arg Ser His Thr Arg  
 35 40 45  
 Ser Asn Leu Lys Arg Asp Val Ala His Leu Tyr Arg Gly Val Gly Ser  
 50 55 60  
 Arg Tyr Ile Met Gly Ser Gly Glu Ser Phe Met Gln Leu Gln Gln Arg  
 65 70 75 80  
 Leu Leu Arg Glu Lys Glu Ala Lys Ile Arg Lys Ala Leu Asp Arg Leu  
 85 90 95  
 Arg Lys Lys Arg His Leu Leu Arg Arg Gln Arg Thr Arg Arg Glu Phe  
 100 105 110  
 Pro Val Ile Ser Val Val Gly Tyr Thr Asn Cys Gly Glu His Ala Pro  
 115 120 125  
 Arg Gly Gly Ala Phe Arg Gly Leu Arg Val Thr Gly Glu Asp Ser Pro  
 130 135 140  
 Gly Gly Gly Gln Gly Val Pro Val Val Ser Val Val Pro Tyr Asp Ser  
 145 150 155 160  
 Cys Gly Glu His Val Pro Arg Arg Gly Gly Ser His Gly Arg Arg Val

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<400> 3435
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120
gacagcaatg ccgataccta ctggggagagc gatgggtccc agtgccaaca ctgggtacgg
180
cttactatga agaagggcac cattgtcaag aagctgctac tcgcagtgga taccacagat
240
gacaacttta tgccaaagcg ggtgggtggtc tatgggggtg aaggggacaa cctgaagaag
300
ctgagtgacg tgagcattga cnngagaccc tcatcggggn atgtctgtgt cctggaggac
360
atgaccgtcc acctcccgat catcgagatc cgcacgtggt agtgccgaga tgatgggatt
420
gatgttcgtc tccgaggggt caagatcaag tcatctagac agcgggaact agggttgaat
480
gcagacctgt tccagccaac tagtctggtg cgatatccac gcctagaagg caccgaccct
540
gaagtactgt accgcagagc tgtcctcctg cagagattca tcaagatcct cgatagtgtc
600
ctgcaccacc tgggtacctgc ctgggaccac aactggggca ccttcagtga gattaagcaa
660
gtgaagcagt tcctactgct gtcccgccag cggccaggcc tggtggtctca gtgcctgctt
720
gactctgaga gcagcaagcc cagcttcatt ccacgcctat acatcaaccg ccgtcttgcc
780
atggaacacc gtgcctgccc ctctcgagac cctgcctgca agaatgcagt cttcaccag
840

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gtatatgaag gcctcaagcc ctctgacaaa tatgaaaagc ccctggacta caggtggccc  
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 ggtgggtttcc gggacagcct ggcagatatg tcagaagagc tgtgccctag ctcagcggat  
 1020  
 acccccgtgc ccctgccctt ctttgtacgc acagccaacc agggcaatgg cactggtgag  
 1080  
 gctcgggaca tgtatgtacc caaccctcc tgccgagact ttgccaagta tgaatggatc  
 1140  
 ggacagctga tgggggctgc ccttcgggggt aaggagtcc tggtcctggc cctgcttggt  
 1200  
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 1225

<210> 3436

<211> 408

<212> PRT

<213> Homo sapiens

<400> 3436

Xaa	His	Ser	Leu	Tyr	Asp	His	Trp	Gly	Lys	Glu	Asp	Glu	Asn	Leu	Gly
1				5					10					15	
Ser	Val	Lys	Gln	Tyr	Val	Glu	Ser	Ile	Asp	Val	Ser	Ser	Tyr	Thr	Glu
		20						25					30		
Glu	Phe	Asn	Val	Ser	Cys	Leu	Thr	Asp	Ser	Asn	Ala	Asp	Thr	Tyr	Trp
		35				40					45				
Glu	Ser	Asp	Gly	Ser	Gln	Cys	Gln	His	Trp	Val	Arg	Leu	Thr	Met	Lys
	50					55					60				
Lys	Gly	Thr	Ile	Val	Lys	Lys	Leu	Leu	Leu	Ala	Val	Asp	Thr	Thr	Asp
65				70						75					80
Asp	Asn	Phe	Met	Pro	Lys	Arg	Val	Val	Val	Tyr	Gly	Gly	Glu	Gly	Asp
			85						90					95	
Asn	Leu	Lys	Lys	Leu	Ser	Asp	Val	Ser	Ile	Asp	Xaa	Arg	Pro	Ser	Ser
			100					105					110		
Gly	Xaa	Val	Cys	Val	Leu	Glu	Asp	Met	Thr	Val	His	Leu	Pro	Ile	Ile
		115					120					125			
Glu	Ile	Arg	Ile	Val	Glu	Cys	Arg	Asp	Asp	Gly	Ile	Asp	Val	Arg	Leu
	130					135					140				
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		180						185					190		
Phe	Ile	Lys	Ile	Leu	Asp	Ser	Val	Leu	His	His	Leu	Val	Pro	Ala	Trp
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 275 280 285  
 Asp Lys Tyr Glu Lys Pro Leu Asp Tyr Arg Trp Pro Met Arg Tyr Asp  
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 Gln Trp Trp Glu Cys Lys Phe Ile Ala Glu Gly Ile Ile Asp Gln Gly  
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 Gly Gly Phe Arg Asp Ser Leu Ala Asp Met Ser Glu Glu Leu Cys Pro  
 325 330 335  
 Ser Ser Ala Asp Thr Pro Val Pro Leu Pro Phe Phe Val Arg Thr Ala  
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 Asn Gln Gly Asn Gly Thr Gly Glu Ala Arg Asp Met Tyr Val Pro Asn  
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 Pro Ser Cys Arg Asp Phe Ala Lys Tyr Glu Trp Ile Gly Gln Leu Met  
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&lt;210&gt; 3437

&lt;211&gt; 2081

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3437

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 2081

&lt;210&gt; 3438

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3438

Ala	Cys	Gln	Phe	Leu	Cys	Thr	Gln	Ala	Leu	Ser	Ile	Leu	Gly	Gln	His
1				5				10					15		
Arg	Pro	Pro	Lys	Arg	Asp	Phe	Gln	Val	Glu	Ala	Thr	Thr	Ala	Glu	Asp
			20					25					30		
Glu	Ala	Glu	Pro	Gln	Trp	Glu	Arg	Glu	Gly	Ala	Arg	Phe	Thr	Thr	Pro

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Arg Gly Pro Arg Ser Ala Gly Ser Thr Glu Gly Val Pro Ser Gln Leu
      50          55          60
Pro Leu Arg Val Pro Cys Leu Ala Thr Gln Pro Leu Pro Ala Gln Glu
65          70          75          80
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      85          90          95
Gly Arg Arg Gly Ala Ala Glu Asp Pro
      100          105

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&lt;210&gt; 3439

&lt;211&gt; 1519

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3439

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1140

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&lt;210&gt; 3440

&lt;211&gt; 287

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3440

Cys	Ala	Pro	Pro	Pro	Ile	Pro	Leu	Leu	His	Pro	Pro	Thr	Ser	Leu	Thr
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Leu	Ser	Pro	Cys	Ser	Pro	Val	Ser	Arg	Pro	Pro	Arg	Ala	Ser	Thr	Ala
		20						25					30		
Val	Ala	Ala	Ala	Ala	Arg	Trp	Pro	Arg	Gln	Pro	Arg	His	Pro	Arg	His
		35					40					45			
Thr	Ser	Pro	Met	Pro	Pro	Pro	Ala	Ala	Leu	Arg	Pro	Pro	Ala	Gly	Pro
		50				55					60				
Arg	Arg	Pro	Arg	Xaa	Pro	Gly	Gly	Pro	Gln	His	His	Gln	Pro	Gln	Pro
65					70				75					80	
Pro	Leu	Trp	Thr	Pro	Thr	Pro	Pro	Ser	Pro	Ala	Ser	Asp	Trp	Pro	Pro
				85				90					95		
Leu	Pro	Pro	Asn	Arg	Pro	Pro	Gln	Asn	Pro	Gly	Pro	Thr	Leu	Pro	Trp
			100				105					110			
Arg	Gln	Arg	Asp	Lys	Gly	Gly	Pro	Ser	Pro	Leu	Pro	Glu	Ala	Arg	Thr
		115					120					125			
Pro	Trp	Gly	Gly	Gly	Glu	Asp	Val	Ser	Ala	Gly	Pro	Leu	Xaa	Thr	Pro
		130				135					140				
Phe	Leu	Ser	Ala	Pro	Leu	Val	Pro	Arg	Ser	Pro	Gly	Gly	Glu	Ser	Ala
145					150					155				160	
Asp	Ser	Ser	Gln	Ala	Gly	Thr	Arg	Leu	Val	Pro	Glu	His	Ala	Ala	Ala
			165					170					175		
His	Thr	Gln	Gly	His	Gly	Pro	Ser	Gly	Pro	Gly	Thr	Trp	Ser	Gly	Ser
		180						185					190		
Glu	Arg	Pro	Gly	Cys	Leu	Ala	Asp	Arg	Thr	Ser	Glu	Thr	Thr	Gln	Pro
		195					200					205			
Ser	Phe	Glu	Asp	Ala	Pro	Ala	Gln	Pro	Ser	Pro	Gly	Val	Pro	Trp	Arg
		210				215					220				
Thr	Thr	Leu	Ala	Glu	Thr	Leu	Leu	Ile	Pro	Gly	Leu	Glu	Leu	Leu	Gly
225					230					235					240
Gly	Arg	Gln	Ala	Ser	Thr	Pro	Thr	Leu	Gly	Asn	Ala	Glu	Pro	Leu	Arg
			245					250					255		
Met	Cys	Ala	Arg	Gly	Arg	Val	Cys	Val	Phe	Leu	Arg	Val	Ser	Leu	Phe

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<210> 3441  
 <211> 2074  
 <212> DNA  
 <213> Homo sapiens

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&lt;210&gt; 3442

&lt;211&gt; 374

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3442

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 Thr Val Asp Pro Cys His Lys Phe Thr Trp Cys Leu Asp Ala Cys Ile  
 50 55 60  
 Arg Glu Arg Phe Val Asp Ser Lys Arg Ala Arg Glu Leu Gln Gly Phe  
 65 70 75 80  
 Leu Asp Asp Val Lys Lys Gly Gln Glu Gln Val Leu Gly Asp Leu Ser  
 85 90 95  
 Met Ile Leu Cys Asp Pro Phe Ala Ile Asn Thr Leu Ala Leu Ser Thr  
 100 105 110  
 Val Arg His Leu Gln Glu Leu Val Gly Gln Glu Thr Leu Pro Arg Asp  
 115 120 125  
 Ser Pro Asp Leu Leu Leu Leu Leu Arg Leu Leu Ala Leu Gly Gln Gly  
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 Ala Trp Asp Met Ile Asp Ser Gln Val Phe Lys Glu Pro Lys Met Glu  
 145 150 155 160  
 Val Glu Leu Ile Thr Arg Phe Leu Pro Met Leu Met Ser Phe Leu Val

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 Ala Pro Val Ser Tyr Pro Asn Thr Leu Pro Glu Ser Phe Thr Lys Phe  
 195 200 205  
 Leu Gln Glu Gln Arg Met Ala Cys Glu Val Gly Leu Tyr Tyr Val Leu  
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 His Ile Thr Lys Gln Arg Asn Lys Asn Ala Leu Leu Arg Leu Leu Pro  
 225 230 235 240  
 Gly Leu Val Glu Thr Phe Gly Asp Leu Ala Phe Gly Asp Ile Phe Leu  
 245 250 255  
 His Leu Leu Thr Gly Asn Leu Ala Leu Leu Ala Asp Glu Phe Ala Leu  
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 275 280 285  
 Pro Arg Lys Glu Asn Val His Arg His Ala Leu Arg Leu Leu Ile His  
 290 295 300  
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 325 330 335  
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 Ala Gln Ala Ala Glu Thr Pro Ala Leu Glu Leu Pro Leu Pro Ser Val  
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&lt;210&gt; 3443

&lt;211&gt; 2070

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3443

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&lt;210&gt; 3444

&lt;211&gt; 579

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3444

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      20              25              30
Ser Glu Asn Val Glu Lys Ser Lys Ala Tyr Lys Leu Asn Pro Lys Phe
      35              40              45
Cys Ser Leu Ser Phe Gln Ala Thr Lys Cys Lys Leu Ala Gly Leu Glu
      50              55              60
Val Leu Ser Asp Asp Pro Asp Leu Val Lys Val Val Glu Ser Leu Thr
65              70              75              80
Cys Gly Lys Ile Phe Ala Val Glu Ile Leu Asp Lys Ala Asp Ile Pro
      85              90              95
Leu Val Val Leu Tyr Asp Thr Ser Gly Glu Asp Asp Ile Asn Ile Asn
      100             105             110
Ala Thr Cys Leu Lys Ala Ile Cys Asp Lys Ser Leu Glu Val His Leu
      115             120             125
Gln Val Asp Ala Met Tyr Thr Asn Val Lys Ile Thr Asn Ile Cys Ser
      130             135             140
Asp Gly Thr Leu Tyr Cys Gln Val Pro Cys Lys Gly Leu Asn Lys Leu
145             150             155             160
Ser Asp Leu Leu Arg Lys Ile Glu Asp Tyr Phe His Cys Lys His Met
      165             170             175
Thr Ser Glu Cys Phe Val Ser Leu Pro Phe Cys Gly Lys Ile Cys Leu
      180             185             190
Phe His Cys Lys Gly Lys Trp Leu Arg Val Glu Ile Thr Asn Val His
      195             200             205
Ser Ser Arg Ala Leu Asp Val Gln Phe Leu Asp Ser Gly Thr Val Thr
      210             215             220
Ser Val Lys Val Ser Glu Leu Arg Glu Ile Pro Pro Arg Phe Leu Gln
225             230             235             240
Glu Met Ile Ala Ile Pro Pro Gln Ala Ile Lys Cys Cys Leu Ala Asp
      245             250             255
Leu Pro Gln Ser Ile Gly Met Trp Thr Pro Asp Ala Val Leu Trp Leu
      260             265             270
Arg Asp Ser Val Leu Asn Cys Ser Asp Cys Ser Ile Lys Val Thr Lys
      275             280             285
Val Asp Glu Thr Arg Gly Ile Ala His Val Tyr Leu Phe Thr Pro Lys
      290             295             300
Asn Phe Pro Asp Pro His Arg Ser Ile Asn Arg Gln Ile Thr Asn Ala
305             310             315             320
Asp Leu Trp Lys His Gln Lys Asp Val Phe Leu Ser Ala Ile Ser Ser
      325             330             335
Gly Ala Asp Ser Pro Asn Ser Lys Asn Gly Asn Met Pro Met Ser Gly
      340             345             350
Asn Thr Gly Glu Asn Phe Arg Lys Asn Leu Thr Asp Val Ile Lys Lys
      355             360             365
Ser Met Val Asp His Thr Ser Ala Phe Ser Thr Glu Glu Leu Pro Pro
      370             375             380
Pro Val His Leu Ser Lys Pro Gly Glu His Met Asp Val Tyr Val Pro
385             390             395             400
Val Ala Cys His Pro Gly Tyr Phe Val Ile Gln Pro Trp Gln Glu Ile

```

405 410 415  
 His Lys Leu Glu Val Leu Met Glu Glu Met Ile Leu Tyr Tyr Ser Val  
 420 425 430  
 Ser Glu Glu Arg His Ile Ala Val Glu Lys Asp Gln Val Tyr Ala Ala  
 435 440 445  
 Lys Val Glu Asn Lys Trp His Arg Val Leu Leu Lys Gly Ile Leu Thr  
 450 455 460  
 Asn Gly Leu Val Ser Val Tyr Glu Leu Asp Tyr Gly Lys His Glu Leu  
 465 470 475 480  
 Val Asn Ile Arg Lys Val Gln Pro Leu Val Asp Met Phe Arg Lys Leu  
 485 490 495  
 Pro Phe Gln Ala Val Thr Ala Gln Leu Ala Gly Val Lys Cys Asn Gln  
 500 505 510  
 Trp Ser Glu Glu Ala Ser Met Val Phe Arg Asn His Val Glu Lys Lys  
 515 520 525  
 Pro Leu Val Ala Leu Val Gln Thr Val Ile Glu Asn Ala Asn Pro Trp  
 530 535 540  
 Asp Arg Lys Val Val Val Tyr Leu Val Asp Thr Ser Leu Pro Asp Thr  
 545 550 555 560  
 Asp Thr Trp Ile His Asp Phe Met Ser Glu Tyr Leu Ile Glu Leu Ser  
 565 570 575  
 Lys Val Asn

&lt;210&gt; 3445

&lt;211&gt; 2086

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3445

nnacgcgtgg cgccagaggg tatccaaggg cggacctggc gcgcaggcgc tgacccgacc  
 60  
 tggcagtgg ctggccgagg ccttggtgga gaggccttaa ccccgccggg cggcgcgcg  
 120  
 cctgcatgag agttgggccc cgggcggggg tggagcctac tcggggcgac tgcgatggac  
 180  
 gccttagaag gagagagctt tgcgctgtct ttctcctccg cctctgatgc agaatttgat  
 240  
 gctgtgggtg gatatttaga ggacattatc atggatgacg agttccagtt attacagaga  
 300  
 aatttcatgg acaagtacta cctggagttt gaagacacag aagagaataa actcatctac  
 360  
 acacctatct ttaatgaata ctttcttttg gtagaaaaat acattgaaga acagctgctg  
 420  
 cagcggattc ctgagttcaa catggcagcc ttcaccacaa cattacacca tctgttccgt  
 480  
 ttgaggcacc ataaggatga agtggctggg gacatattcg acatgctgct caccttcaca  
 540  
 gattttctgg cttttaaaga aatgtttttg gactacagag cagaaaaaga aggccgagga  
 600  
 ctggacttaa gcagtggctt agtggtgact tcattgtgca aatcatcttc tctgccagct  
 660  
 tcccagaaca atctgcggca ctaggctcta cctccagcca atgaatggga tcattctgga  
 720

tgtcaccagc ccaataggct cagctcatga tgacagaaca catcttggaa agactgactc  
780  
tgttatgtaa ctcttcattt atgttaagta ttaataggctc aaaacaaaaa tgacctaac  
840  
ctcttgacc tatttatcct gaaacacctt cttgtattca ttaaccatag tactcctccc  
900  
cacctcaagt agacacctct ctcaggagct tctgagtcag acgcctctgg agcgagccct  
960  
atgtcaggca ctccacctgg ggggcccttc ccagcatac ctgctggtgt gtaagtgtgg  
1020  
actaaccgc cgccaccacc ctctgttcca gcaggctctg catgaatctt tgtgcacttg  
1080  
cacctctttt tcacatgggc cacagtttca gtacttcagc ctcagtgggg ttcttgatgt  
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1260  
gtactccta gtcttaacat ttgcagtcct tgtgtcactg tcttctgggc ctgatgtagt  
1320  
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1380  
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1440  
agatcaaagt attatatgct gtgtgctttt taggtgtttg ttagtactgt gaaggcaaaa  
1500  
atgctttcta cattgacatt cttcctatt ttactgggca cctatgaatg tatgctgtgt  
1560  
gctagaaata gactaaaaca tttcctata gcatgttagt gtgtttgcat gtttgctgaa  
1620  
aatcctttgt gtataaacca gtttgtaagg ttctctgggt taggtaggga ctctgcagtt  
1680  
tcttctgtc aaaatctctc ctaccaagat ggtgttccac tgtccagccc agcatgagta  
1740  
gcaggtagag cacagcttta ctggctgttt gtatgctttg gtttagtgca atgtgtggta  
1800  
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1860  
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1920  
cttttcactt ggccattctg gttttaaagg acaagctaca agctctgtgt ttctgtactg  
1980  
atgtgtcact tattaataac ttttgtacca tgagtaaaac ttcagggtgt tcgcaagaac  
2040  
caccattctc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa  
2086

&lt;210&gt; 3446

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3446

Met Asp Ala Leu Glu Gly Glu Ser Phe Ala Leu Ser Phe Ser Ser Ala

```

      1           5           10           15
Ser Asp Ala Glu Phe Asp Ala Val Val Gly Tyr Leu Glu Asp Ile Ile
      20           25           30
Met Asp Asp Glu Phe Gln Leu Leu Gln Arg Asn Phe Met Asp Lys Tyr
      35           40           45
Tyr Leu Glu Phe Glu Asp Thr Glu Glu Asn Lys Leu Ile Tyr Thr Pro
      50           55           60
Ile Phe Asn Glu Tyr Ile Ser Leu Val Glu Lys Tyr Ile Glu Glu Gln
      65           70           75           80
Leu Leu Gln Arg Ile Pro Glu Phe Asn Met Ala Ala Phe Thr Thr Thr
      85           90           95
Leu His His Leu Phe Arg Leu Arg His His Lys Asp Glu Val Ala Gly
      100          105          110
Asp Ile Phe Asp Met Leu Leu Thr Phe Thr Asp Phe Leu Ala Phe Lys
      115          120          125
Glu Met Phe Leu Asp Tyr Arg Ala Glu Lys Glu Gly Arg Gly Leu Asp
      130          135          140
Leu Ser Ser Gly Leu Val Val Thr Ser Leu Cys Lys Ser Ser Ser Leu
      145          150          155          160
Pro Ala Ser Gln Asn Asn Leu Arg His
      165

```

&lt;210&gt; 3447

&lt;211&gt; 936

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3447

```

acgcgtgaag ggtttgcggg gaagatggag tatcccgcgc cggccacggt gcaggccgcg
60
gacggcggag cggccgggccc ttacagcagc tcggagttgc tggagggcca ggagccggac
120
ggggtgcgct ttgaccgcga gagggcgcgc cgcctgtggg aagccgtgtc cggtgcccag
180
ccggtgggta gagaggaagt ggagcacatg atccagaaga accaatgtct cttcaccaac
240
accagtgtgta aggtttgctg cgccttgctt atttctgagt cccagaagct ggcacattac
300
cagagcaaaa aacatgccaa caaagtgaag agatacctag caatccatgg aatggagaca
360
ttaaaggggg aaacgaagaa gctagactca gatcagaaga gcagcagaag caaagacaag
420
aaccagtgtc gccccatctg taacatgacc ttttcctccc ctgtcgtggc ccagtcgcac
480
tacctgggga agaccacgc aaagaactta aagctgaagc agcagtccac taagtgga
540
gccttgacc agaatagaga gatgatagac ccagacaagt tctgcagcct ctgccatgca
600
actttcaacg accctgtcat ggctcaacaa cattatgtgg gcaagaaaca cagaaaacag
660
gagaccaagc tcaaactaat ggcacgctat gggcggtgg cggaccctgc tgtcactgac
720
ttccagctg gaaagggcta cccctgcaaa acatgtaaga tagtgctgaa ctccatagaa
780

```

cagtaccaag ctcatgtcag cggcttcaaa cacaagaacc agtcaccaa aacagtggca  
 840  
 tcatccctgg gccagattcc aatgcaaagg caaccattc agaaagactc aaccaccttg  
 900  
 gaagactaga ggtgattctg cccagcatcc catatt  
 936

<210> 3448

<211> 302

<212> PRT

<213> Homo sapiens

<400> 3448

Thr	Arg	Glu	Gly	Phe	Ala	Gly	Lys	Met	Glu	Tyr	Pro	Ala	Pro	Ala	Thr
1				5					10					15	
Val	Gln	Ala	Ala	Asp	Gly	Gly	Ala	Ala	Gly	Pro	Tyr	Ser	Ser	Ser	Glu
			20					25					30		
Leu	Leu	Glu	Gly	Gln	Glu	Pro	Asp	Gly	Val	Arg	Phe	Asp	Arg	Glu	Arg
		35					40					45			
Ala	Arg	Arg	Leu	Trp	Glu	Ala	Val	Ser	Gly	Ala	Gln	Pro	Val	Gly	Arg
	50					55					60				
Glu	Glu	Val	Glu	His	Met	Ile	Gln	Lys	Asn	Gln	Cys	Leu	Phe	Thr	Asn
65					70					75					80
Thr	Gln	Cys	Lys	Val	Cys	Cys	Ala	Leu	Leu	Ile	Ser	Glu	Ser	Gln	Lys
			85					90						95	
Leu	Ala	His	Tyr	Gln	Ser	Lys	Lys	His	Ala	Asn	Lys	Val	Lys	Arg	Tyr
			100					105					110		
Leu	Ala	Ile	His	Gly	Met	Glu	Thr	Leu	Lys	Gly	Glu	Thr	Lys	Lys	Leu
		115					120					125			
Asp	Ser	Asp	Gln	Lys	Ser	Ser	Arg	Ser	Lys	Asp	Lys	Asn	Gln	Cys	Cys
	130					135					140				
Pro	Ile	Cys	Asn	Met	Thr	Phe	Ser	Ser	Pro	Val	Val	Ala	Gln	Ser	His
145					150					155					160
Tyr	Leu	Gly	Lys	Thr	His	Ala	Lys	Asn	Leu	Lys	Leu	Lys	Gln	Gln	Ser
			165					170						175	
Thr	Lys	Val	Glu	Ala	Leu	His	Gln	Asn	Arg	Glu	Met	Ile	Asp	Pro	Asp
		180						185					190		
Lys	Phe	Cys	Ser	Leu	Cys	His	Ala	Thr	Phe	Asn	Asp	Pro	Val	Met	Ala
	195						200					205			
Gln	Gln	His	Tyr	Val	Gly	Lys	Lys	His	Arg	Lys	Gln	Glu	Thr	Lys	Leu
	210					215					220				
Lys	Leu	Met	Ala	Arg	Tyr	Gly	Arg	Leu	Ala	Asp	Pro	Ala	Val	Thr	Asp
225					230					235					240
Phe	Pro	Ala	Gly	Lys	Gly	Tyr	Pro	Cys	Lys	Thr	Cys	Lys	Ile	Val	Leu
			245					250						255	
Asn	Ser	Ile	Glu	Gln	Tyr	Gln	Ala	His	Val	Ser	Gly	Phe	Lys	His	Lys
		260						265					270		
Asn	Gln	Ser	Pro	Lys	Thr	Val	Ala	Ser	Ser	Leu	Gly	Gln	Ile	Pro	Met
	275						280					285			
Gln	Arg	Gln	Pro	Ile	Gln	Lys	Asp	Ser	Thr	Thr	Leu	Glu	Asp		
	290					295					300				

<210> 3449

<211> 877

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3449

```

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ccccccggcg ccccggtctt gccgctgcac aattcctcgg tgactgccaa ctcccagttc
120
ccggcccttc tggccggcac caaccccggtt gctgtcgtcg cggatggagg cagttgcccc
180
gcacactacc cgggtgcacga gtgcgtcttc aagggggatg tgaggagact ctctctcttc
240
atccgcacgc acaatatcgg gcagaaagat aatcacggaa atactccttt acaccttgct
300
gtgatgttag gaaataaaga atgtgcccat ttacttttgg ctcaaatgc tccagtcaag
360
gtgaaaaatg ctccagggatg gagccctctg gcggaagcca tcagctatgg agataggcag
420
atgattacag ctcttttgag gaagcttaag cagcaatcca gggaaagtgt tgaagaaaaa
480
cgacctcgat tattaaaagc cctgaaagag ctaggtgact tttatctaga acttcactgg
540
gattttcaaa gctgggtgcc ttacttttcc cgaattctgc ctcccgatgc atgtaaaata
600
tacaacaag gtatcaatat caggcttgac acaactctca tagactttac tgacatgaag
660
tgccaacgag gggatctaag cttcattttc aatggggatg cggcgccctc tgaatctttt
720
gtagtattag acaatgaaca aaaagtttat cagcgaatac atcatgaggc tcacatccca
780
ggaatcagag atggaaacag aagaagaggt ggatatttta atgagcagtg atatttactc
840
tgcaacttta tcaacaaaat caatttcttt cacgcgt
877

```

&lt;210&gt; 3450

&lt;211&gt; 276

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3450

```

Xaa Ile Phe Ser Asn His His His Arg Leu Gln Leu Lys Ala Ala Pro
1      5      10      15
Ala Ser Ser Asn Pro Pro Gly Ala Pro Ala Leu Pro Leu His Asn Ser
20     25     30
Ser Val Thr Ala Asn Ser Gln Ser Pro Ala Leu Leu Ala Gly Thr Asn
35     40     45
Pro Val Ala Val Val Ala Asp Gly Gly Ser Cys Pro Ala His Tyr Pro
50     55     60
Val His Glu Cys Val Phe Lys Gly Asp Val Arg Arg Leu Ser Ser Leu
65     70     75     80
Ile Arg Thr His Asn Ile Gly Gln Lys Asp Asn His Gly Asn Thr Pro
85     90     95
Leu His Leu Ala Val Met Leu Gly Asn Lys Glu Cys Ala His Leu Leu

```

```
<210> 3451
<211> 595
<212> DNA
<213> Homo sapiens
```

```
<210> 3452
<211> 192
<212> PRT
```

&lt;213&gt; Homo sapiens

&lt;400&gt; 3452

```

Met Glu Ala Val Pro Leu Pro Ala Lys Glu Glu Arg Gly Met Gly Ala
 1           5           10           15
Leu Ile Ala Thr Asn Thr Thr Glu Asn Ser Thr Arg Glu Glu Val Asn
 20           25           30
Glu Arg Gln Ser His Pro Ala Thr Gln Gln Gln Leu Gly Lys Thr Leu
 35           40           45
Gln Ser Lys Gln Leu Pro Gln Val Pro Arg Pro Leu Gln Leu Phe Ser
 50           55           60
Ala Lys Glu Leu Arg Asp Ser Ser Ile Asp Thr His Gln Tyr His Glu
 65           70           75           80
Gly Leu Ser Lys Ala Thr Gln Asp Gln Ile Leu Gln Thr Leu Ile Gln
 85           90           95
Arg Val Arg Arg Gln Asn Leu Leu Ser Val Val Pro Pro Ser Gln Phe
100           105           110
Asn Phe Ala His Ser Gly Phe Gln Leu Glu Asp Ile Ser Thr Ser Gln
115           120           125
Arg Phe Met Leu Gly Phe Ala Gly Arg Arg Thr Ser Lys Pro Ala Met
130           135           140
Ala Gly His Tyr Leu Leu Asn Ile Ser Thr Tyr Gly Arg Gly Ser Glu
145           150           155           160
Ser Phe Arg Arg Thr His Ser Val Asn Pro Glu Asp Arg Phe Cys Leu
165           170           175
Ser Ser Pro Thr Glu Ala Leu Lys Met Gly Tyr Thr Asn Cys Lys Asn
180           185           190

```

&lt;210&gt; 3453

&lt;211&gt; 477

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3453

```

nnacgcgtga aggggtcccgg ccgcggggct ggcgggctga ggggagaaaa gatggcggcg
60
gcggcggcag ctggtgcggc ctccgggctg ccgggtccag tggcacaagg attaaaggaa
120
gcgttagtgg atacgctcac cgggatccta tccccagtac aggaggtgcg ggcggctgct
180
gaagaacaga ttaagggtgct ggaggtgacg gaggaatttg gtgttcactt ggcagaactg
240
actgtagatc cccagggggc actggcaatc cgtcagctgg catcagtcac cttgaaacaa
300
tatgtggaga ctactggtg tgcccaatca gagaaattta ggcctcctga aactacagaa
360
agggcaaaaa ttgttatccg ggagctattg cctaattgggt tgagagaatc gataagcaaa
420
gtgcgctcca gtgtggccta tgcagtgtca gccattgcc actgggactg gcctgaa
477

```

&lt;210&gt; 3454

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3454

Xaa Arg Val Lys Gly Pro Gly Arg Gly Ala Gly Gly Leu Arg Gly Glu  
 1 5 10 15  
 Lys Met Ala Ala Ala Ala Ala Gly Ala Ala Ser Gly Leu Pro Gly  
 20 25 30  
 Pro Val Ala Gln Gly Leu Lys Glu Ala Leu Val Asp Thr Leu Thr Gly  
 35 40 45  
 Ile Leu Ser Pro Val Gln Glu Val Arg Ala Ala Ala Glu Glu Gln Ile  
 50 55 60  
 Lys Val Leu Glu Val Thr Glu Glu Phe Gly Val His Leu Ala Glu Leu  
 65 70 75 80  
 Thr Val Asp Pro Gln Gly Ala Leu Ala Ile Arg Gln Leu Ala Ser Val  
 85 90 95  
 Ile Leu Lys Gln Tyr Val Glu Thr His Trp Cys Ala Gln Ser Glu Lys  
 100 105 110  
 Phe Arg Pro Pro Glu Thr Thr Glu Arg Ala Lys Ile Val Ile Arg Glu  
 115 120 125  
 Leu Leu Pro Asn Gly Leu Arg Glu Ser Ile Ser Lys Val Arg Ser Ser  
 130 135 140  
 Val Ala Tyr Ala Val Ser Ala Ile Ala His Trp Asp Trp Pro Glu  
 145 150 155

&lt;210&gt; 3455

&lt;211&gt; 4886

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3455

nncttcggca caggattgat ccagtcctcc ttccttcact accacatgaa tgctgggcag  
 60  
 cccaggatca cactcactgc accctcaact cagaccgtta cctggcacac tggcctcact  
 120  
 cttgtcggag actgagctat tggcagtgcc ttcagctctg agctcaggca cctcgaacat  
 180  
 tgtttttgtc gttaaggatc ctaaagtgt gtggggagt atcacatttt tctcaacatc  
 240  
 cctggcccca cctcttctgc cacaaacgtc agcatggtgg tatcagccgg ccctttgtcc  
 300  
 agcgagaagg cagagatgaa cattctagaa atcaatgaga aattgcgccc ccagttggca  
 360  
 gagaagaaac agcagttcag aaacctcaaa gagaaatgtt ttctaactca actggccggc  
 420  
 ttcctggcca accgacagaa gaaatacaaa tatgaagagt gtaaagatct cataaaattt  
 480  
 atgctgagga atgagcgaca gttcaaggag gagaagcttg cagagcagct caagcaagct  
 540  
 gaggagctca ggcaatataa agtcctgggt cagcgtcagg aacgagagct gaccaggtta  
 600  
 agggagaagt tacgggaagg gagagatgcc tcccgctcat tgaatgagca tctccaggcc  
 660  
 ctctcactc cggatgagcc ggacaagtcc caggggcagg acctccaaga acagctggct  
 720

gaggggtgta ggctggcaca gcacctcgtc caaaagctca gcccagaaaa tgacaacgat  
780  
gacgatgaag atgttcaagt tgaggtggct gagaaagtgc agaaatcgtc tgccccagg  
840  
gagatgcaga aggctgaaga aaaggaagtc cctgaggact cactggagga atgtgccatc  
900  
acttgttcaa atagccatgg cccttatgac tccaaccagc cacataagaa aacaaaaatc  
960  
acatttgagg aagacaaagt cgactcaact ctcattggct catcctctca tgttgaatgg  
1020  
gaggatgctg tacacattat tccagaaaat gaaagtgatg atgaggaaga ggaagaaaa  
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1260  
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1320  
agagagctgc tggatgagaa agggcctgaa gtcttgagg actcactgga tagatgttat  
1380  
tcaactcctt caggttgtct tgaactgact gactcatgcc agccctacag aagtgccttt  
1440  
tacgtattgg agcaacagcg tgttggcttg gctgttgaca tggatgaaat tgaaaagtac  
1500  
caagaagtgg aagaagacca agaccatca tgccccaggc tcagcagga gctgctggat  
1560  
gagaaagagc ctgaagtctt gcaggactca ctggatagat gttattcgac tccttcaggt  
1620  
tatcttgaac tgctgactt aggccagccc tacagcagtg ctgtttactc attggaggaa  
1680  
cagtaccttg gcttggctct tgacgtggac agaattaaaa aggaccaaga agaggaagaa  
1740  
gaccaaggcc caccatgccc caggctcagc agggagctgc tggaggtagt agagcctgaa  
1800  
gtcttgagg actcactgga tagatgttat tcaactcctt ccagttgtct tgaacagcct  
1860  
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1920  
tctcttgacg tgggagaaat tgaaaagaag gggaagggga agaaaagaag gggaagaaga  
1980  
tcaaagaagg aaagaagaag gggaagaaaa gaaggggaag aagatcaaaa ccaccatgc  
2040  
cccaggctca gcaggagct gctggatgag aaagggcctg aagtcttgca ggactcactg  
2100  
gatagatgtt attcaactcc ttcaggttgt cttgaactga ctgactcatg ccagccctac  
2160  
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2220  
attgaaaagt accaagaagt ggaagaagac caagaccat catgccccag gctcagcggg  
2280  
gagctgttgg atgagaaaga gcctgaagtc ttgcaggagt cactggatag atgctattca  
2340

actccttcag gttgtcttga actgactgac tcatgccagc cctacagaag tgccttttac  
2400  
atattggagc aacagcgtgt tggcttggct gttgacatgg atgaaattga aaagtaccaa  
2460  
gaagtggaag aagaccaaga cccatcatgc cccaggctca gcaggagct gctggatgag  
2520  
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&lt;210&gt; 3456

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3456

Glu	Ile	Glu	Lys	Lys	Gly	Lys	Gly	Lys	Lys	Arg	Arg	Gly	Arg	Arg	Ser
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Lys	Lys	Gln	Arg	Arg	Arg	Gly	Arg	Lys	Glu	Gly	Glu	Glu	Asp	Gln	Asn
			20					25					30		
Pro	Pro	Cys	Pro	Arg	Leu	Asn	Gly	Val	Leu	Met	Glu	Val	Glu	Glu	Pro
		35					40					45			
Glu	Val	Leu	Gln	Asp	Ser	Leu	Asp	Arg	Cys	Tyr	Ser	Thr	Pro	Ser	Met
	50					55					60				
Tyr	Phe	Glu	Leu	Pro	Asp	Ser	Phe	Gln	His	Tyr	Arg	Ser	Val	Phe	Tyr
65					70					75				80	
Ser	Phe	Glu	Glu	Glu	His	Ile	Ser	Phe	Ala	Leu	Tyr	Val	Asp	Asn	Arg
				85					90					95	
Phe	Phe	Thr	Leu	Thr	Val	Thr	Ser	Leu	His	Leu	Val	Phe	Gln	Met	Gly
			100					105					110		
Val	Ile	Phe	Pro	Gln											

115

<210> 3457  
 <211> 646  
 <212> DNA  
 <213> Homo sapiens

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 120  
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 180  
 aagtgaggat gcgtatgttn gggtggctgt gtctgtatct gcatttgcac gngtgtattg  
 240  
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 300  
 gtgcctgtgg accagcacct gtgttgccac atttgggtga cggtagatcc atgcactnng  
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 420  
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 480  
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 540  
 aacctccag gccttctcct gccacaggct ctgtctctgt cccgtcgctg tgctctctgc  
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<210> 3458  
 <211> 61  
 <212> PRT  
 <213> Homo sapiens

<400> 3458  
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 Arg Cys Val Xaa Val Pro Gly Cys Val Cys Ala Cys Val Cys Val Asp  
 20 25 30  
 Ile Cys Ala Cys Leu Phe Thr His Arg Trp Glu Cys Arg Val Cys Ile  
 35 40 45  
 Leu Cys Xaa Cys Thr Cys Thr Gln Ala Xaa Ala Gly Lys  
 50 55 60

<210> 3459  
 <211> 592  
 <212> DNA  
 <213> Homo sapiens

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 120  
 gacctactt cactgcaggg ggctcagccc agtctgcctc aggcagaaca agggctctggg  
 180  
 ggtggctgtg gggggctgtg gatgggtccc agtgggctg ctgccactcc caccacatgg  
 240  
 gacctgcctt cgggccctgc caggattcca gtcctgcctt gtcacccca gcttccaggg  
 300  
 ccttcctgt gtgcagctc agtttgctg ctgcagaata agcaccacgc tccctcgtgg  
 360  
 gcagaggcac cggcagactc accacgcgcc ctgcaggcat gtcctgtgct gtgccaggca  
 420  
 ggccccggcc acgtccctgc ccccgagct ggccttcagc ggggacagtg gtcagcactg  
 480  
 aagacagtca tacctgcccg gccggcactg ccctgtcag cacggggaca attgaactt  
 540  
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<210> 3460

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3460

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Ser	Gly	Pro	Ala	Arg	Ile	Pro	Val	Leu	Pro	Cys	Ser	Pro	Gln	Leu	Pro
			20					25					30		
Gly	Pro	Ser	Leu	Cys	Ala	Ala	Ser	Val	Cys	Leu	Leu	Gln	Asn	Lys	His
			35					40					45		
His	Ala	Pro	Ser	Trp	Ala	Glu	Ala	Pro	Ala	Asp	Ser	Pro	Arg	Ala	Leu
		50				55				60					
Gln	Ala	Cys	Pro	Val	Leu	Cys	Gln	Ala	Gly	Pro	Gly	His	Val	Pro	Ala
65					70					75				80	
Pro	Gly	Ala	Gly	Leu	Gln	Arg	Gly	Gln	Trp	Ser	Ala	Leu	Lys	Thr	Val
			85					90						95	
Ile	Pro	Ala	Arg	Pro	Ala	Leu	Pro	Cys	Ser	Ala	Arg	Gly	Gln	Phe	Glu
			100					105						110	
Leu	Lys	Leu													
			115												

<210> 3461

<211> 474

<212> DNA

<213> Homo sapiens

<400> 3461

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 120  
 agctttgcgt ccgtggcaga tgtcagctcc agtcgcagcc gcacctccg gatggccctg  
 180

ctggaagcca gcatcgggggt ggctgggatg ctggcaagcc tcctcggggg cactgggctc  
 240  
 cgggcccagg gttatgcaa ccccttcttg ctggccttg ccttgctgat agccatgact  
 300  
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 360  
 acgttccgtc accaccgatc cattgtccag ctctatgtgg ctcccgcgcc agagaagtcc  
 420  
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 474

<210> 3462

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3462

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Leu	Leu	Gly	Gly	His	Trp	Leu	Arg	Ala	Gln	Gly	Tyr	Ala	Asn	Pro	Phe
				20				25					30		
Trp	Leu	Ala	Leu	Ala	Leu	Leu	Ile	Ala	Met	Thr	Leu	Tyr	Ala	Ala	Phe
				35				40					45		
Cys	Phe	Gly	Glu	Thr	Leu	Lys	Glu	Pro	Lys	Ser	Thr	Arg	Leu	Phe	Thr
				50				55				60			
Phe	Arg	His	His	Arg	Ser	Ile	Val	Gln	Leu	Tyr	Val	Ala	Pro	Ala	Pro
65					70					75				80	
Glu	Lys	Ser	Arg	Lys	His	Leu	Ala	Leu	Tyr	Ser	Leu	Ala	Ile	Phe	Val
				85				90						95	
Val	Ile	Thr	Val	His											
				100											

<210> 3463

<211> 1734

<212> DNA

<213> Homo sapiens

<400> 3463

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 360  
 ctgaactgg tagaaaagct tgttccagaa gccgcagaga taacagcaag tgtaaagat  
 420  
 cttccaggac ttaagacacc agtaggtaga ggaagagcct ggcttcgttt ggcattaatg  
 480

caaaagaaac tttcagaata tatgaaagct ttgatcaata agaaagaact tctcagtga  
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 720  
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 780  
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&lt;210&gt; 3464

&lt;211&gt; 434

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3464

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Leu	Glu	Asp	Pro	Ala	Val	Pro	Arg	Leu	Thr	Ala	Ala	Leu	Pro	Ala	Ala
			20					25					30		
Glu	Leu	Pro	Glu	Arg	Arg	Arg	Arg	Gln	Gln	Arg	Gln	Gly	Lys	His	His

35 40 45  
 Pro Asn Tyr Leu Met Ala Asn Glu Arg Met Asn Leu Met Asn Met Ala  
 50 55 60  
 Lys Leu Ser Ile Lys Gly Leu Ile Glu Ser Ala Leu Asn Leu Gly Arg  
 65 70 75 80  
 Thr Leu Asp Ser Asp Tyr Ala Pro Leu Gln Gln Phe Phe Val Val Met  
 85 90 95  
 Glu His Cys Leu Lys His Gly Leu Lys Ala Lys Lys Thr Phe Leu Gly  
 100 105 110  
 Gln Asn Lys Ser Phe Trp Gly Pro Leu Glu Leu Val Glu Lys Leu Val  
 115 120 125  
 Pro Glu Ala Ala Glu Ile Thr Ala Ser Val Lys Asp Leu Pro Gly Leu  
 130 135 140  
 Lys Thr Pro Val Gly Arg Gly Arg Ala Trp Leu Arg Leu Ala Leu Met  
 145 150 155 160  
 Gln Lys Lys Leu Ser Glu Tyr Met Lys Ala Leu Ile Asn Lys Lys Glu  
 165 170 175  
 Leu Leu Ser Glu Phe Tyr Glu Pro Asn Ala Leu Met Met Glu Glu Glu  
 180 185 190  
 Gly Ala Ile Ile Ala Gly Leu Leu Val Gly Leu Asn Val Ile Asp Ala  
 195 200 205  
 Asn Phe Cys Met Lys Gly Glu Asp Leu Asp Ser Gln Val Gly Val Ile  
 210 215 220  
 Asp Phe Ser Met Tyr Leu Lys Asp Gly Asn Ser Ser Lys Gly Thr Glu  
 225 230 235 240  
 Gly Asp Gly Gln Ile Thr Ala Ile Leu Asp Gln Lys Asn Tyr Val Glu  
 245 250 255  
 Glu Leu Asn Arg His Leu Asn Ala Thr Val Asn Asn Leu Gln Ala Lys  
 260 265 270  
 Val Asp Ala Leu Glu Lys Ser Asn Thr Lys Leu Thr Glu Glu Leu Ala  
 275 280 285  
 Val Ala Asn Asn Arg Ile Ile Thr Leu Gln Glu Glu Met Glu Arg Val  
 290 295 300  
 Lys Glu Glu Ser Ser Tyr Ile Leu Glu Ser Asn Arg Lys Gly Pro Lys  
 305 310 315 320  
 Gln Asp Arg Thr Ala Glu Gly Gln Ala Leu Ser Glu Ala Arg Lys His  
 325 330 335  
 Leu Lys Glu Glu Thr Gln Leu Arg Leu Asp Val Glu Lys Glu Leu Glu  
 340 345 350  
 Met Gln Ile Ser Met Arg Gln Glu Met Glu Leu Ala Met Lys Met Leu  
 355 360 365  
 Glu Lys Asp Val Cys Glu Lys Gln Asp Ala Leu Val Ser Leu Arg Gln  
 370 375 380  
 Gln Leu Asp Asp Leu Arg Ala Leu Lys His Glu Leu Ala Phe Lys Leu  
 385 390 395 400  
 Gln Ser Ser Asp Leu Gly Val Lys Gln Lys Ser Glu Leu Asn Ser Arg  
 405 410 415  
 Leu Glu Glu Lys Thr Asn Gln Met Ala Ala Thr Ile Lys Gln Leu Glu  
 420 425 430  
 Gln Arg

&lt;210&gt; 3465

&lt;211&gt; 2904

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3465

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120  
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240  
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360  
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aaaaaaaaaa aaaaaaaaaa aaaa  
2904

&lt;210&gt; 3466

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3466

```

Thr Arg Pro Pro Glu Arg Ala Met Asp Ala Leu Lys Ser Ala Gly Arg
 1          5          10          15
Ala Leu Ile Arg Ser Pro Ser Leu Ala Lys Gln Ser Trp Gly Gly Gly
          20          25          30
Gly Arg His Arg Lys Leu Pro Glu Asn Trp Thr Asp Thr Arg Glu Thr
          35          40          45
Leu Leu Glu Gly Met Leu Phe Ser Leu Lys Tyr Leu Gly Met Thr Leu
          50          55          60
Val Glu Gln Pro Lys Gly Glu Glu Leu Ser Ala Ala Ala Ile Lys Arg
65          70          75          80
Ile Val Ala Thr Ala Lys Ala Ser Gly Lys Lys Leu Gln Lys Val Thr
          85          90          95
Leu Lys Val Ser Pro Arg Gly Ile Ile Leu Thr Asp Asn Leu Thr Asn
          100          105          110
Gln Leu Ile Glu Asn Val Ser Ile Tyr Arg Ile Ser Tyr Cys Thr Ala
          115          120          125
Asp Lys Met His Asp Lys Val Phe Ala Tyr Ile Ala Gln Ser Gln His
          130          135          140
Asn Gln Ser Leu Glu Cys His Ala Phe Leu Cys Thr Lys Arg Lys Met
145          150          155          160
Ala Gln Ala Val Thr Leu Thr Val Ala Gln Ala Phe Lys Val Ala Phe
          165          170          175
Glu Phe Trp Gln Val Ser Lys Glu Glu Lys Glu Lys Arg Asp Lys Ala
          180          185          190
Ser Gln Glu Gly Gly Asp Val Leu Gly Ala Arg Gln Asp Cys Thr Pro
          195          200          205
Pro Leu Lys Ser Leu Val Ala Thr Gly Asn Leu Leu Asp Leu Glu Glu
          210          215          220
Thr Ala Lys Ala Pro Leu Ser Thr Val Ser Ala Asn Thr Thr Asn Met
225          230          235          240
Asp Glu Val Pro Arg Pro Gln Ala Leu Ser Gly Ser Ser Val Val Trp
          245          250          255
Glu Leu Asp Asp Gly Leu Asp Glu Ala Phe Ser Arg Leu Ala Gln Ser
          260          265          270
Arg Thr Asn Pro Gln Val Leu Asp Thr Gly Leu Thr Ala Gln Asp Met
          275          280          285
His Tyr Ala Gln Cys Leu Ser Pro Val Asp Trp Asp Lys Pro Asp Ser
          290          295          300
Ser Gly Thr Glu Gln Asp Asp Leu Phe Ser Phe
305          310          315

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&lt;210&gt; 3467

&lt;211&gt; 638

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3467

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60
acatttgcaa aataaaaaag ttgtggagga ggaagaaaaa caaaaaccag gatgcactga
120
ggctctgaggt gaaggtccta ggagcatcag ttctctgttg ggatcaaggt tgctgggaca
180

```

gagcttgatc cctgtcaact gctaaaacaa tccaggacaa tccaatagta gagctgaatt  
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 300  
 gtgtaaccac aagactggcc caaactgacc ctattctgtt ggtaacagga ggtatagcag  
 360  
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 420  
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 480  
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 638

&lt;210&gt; 3468

&lt;211&gt; 88

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3468

Met	Ser	Leu	Ser	Ser	Trp	Leu	His	Arg	Glu	Glu	Thr	Leu	Val	Pro	Ser
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Tyr	Asp	Phe	Pro	Pro	Leu	Cys	Met	Ser	Gly	Leu	His	Asp	Phe	Gln	Phe
			20					25					30		
Trp	Leu	Cys	Tyr	Thr	Ser	Cys	Tyr	Gln	Gln	Asn	Arg	Val	Ser	Leu	Gly
		35					40					45			
Gln	Ser	Cys	Gly	Tyr	Thr	Ser	Val	Ser	Gln	Asp	Phe	Leu	Cys	Gln	Arg
		50				55					60				
Ala	Val	Lys	Leu	Arg	Thr	Lys	Val	Ile	Lys	Ile	Gln	Leu	Tyr	Tyr	Trp
65					70				75					80	
Ile	Val	Leu	Asp	Cys	Phe	Ser	Ser								
					85										

&lt;210&gt; 3469

&lt;211&gt; 1710

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3469

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 ccgctgctgt gggccccggc tgcggtccgg gccggcccag atgaagacct tagccaccgg  
 120  
 aacaaagaac cgccggcgcc ggcccagcag ctgcagccgc agcctgtggc tgtgcagggc  
 180  
 cccgagccgg cccgggtcga gaaaatattt acaccagcag ctccagttca taccaataaa  
 240  
 gaagatcctg ctacccaaac taatttggga tttatccatg catttgtcgc tgccatatca  
 300  
 gttattattg tatctgaatt ggggtataag acatttttta tagcagccat catggcaatg  
 360

cgctataacc gcctgaccgt gctggctggt gcaatgcttg ccttgggact aatgacatgc  
420  
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480  
tcaactgtat tatttgccat ttttggcatt agaatgcttc ggggaaggctt aaagatgagc  
540  
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600  
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660  
acagtacctc agaaaaagtg gttgcatttt atttcaccca tttttgttca agctcttaca  
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ttaacattct tagcagaatg gggatgacgc tctcaactaa ctacaattgt attggcagct  
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1710

&lt;210&gt; 3470

&lt;211&gt; 322

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3470

Ala Ala Ala Pro Gly Asn Gly Arg Ala Ser Ala Pro Arg Leu Leu Leu

```

      1           5           10           15
Leu Phe Leu Val Pro Leu Leu Trp Ala Pro Ala Ala Val Arg Ala Gly
      20           25           30
Pro Asp Glu Asp Leu Ser His Arg Asn Lys Glu Pro Pro Ala Pro Ala
      35           40           45
Gln Gln Leu Gln Pro Gln Pro Val Ala Val Gln Gly Pro Glu Pro Ala
      50           55           60
Arg Val Glu Lys Ile Phe Thr Pro Ala Ala Pro Val His Thr Asn Lys
      65           70           75           80
Glu Asp Pro Ala Thr Gln Thr Asn Leu Gly Phe Ile His Ala Phe Val
      85           90           95
Ala Ala Ile Ser Val Ile Ile Val Ser Glu Leu Gly Asp Lys Thr Phe
      100          105          110
Phe Ile Ala Ala Ile Met Ala Met Arg Tyr Asn Arg Leu Thr Val Leu
      115          120          125
Ala Gly Ala Met Leu Ala Leu Gly Leu Met Thr Cys Leu Ser Val Leu
      130          135          140
Phe Gly Tyr Ala Thr Thr Val Ile Pro Arg Val Tyr Thr Tyr Tyr Val
      145          150          155          160
Ser Thr Val Leu Phe Ala Ile Phe Gly Ile Arg Met Leu Arg Glu Gly
      165          170          175
Leu Lys Met Ser Pro Asp Glu Gly Gln Glu Leu Glu Glu Val Gln
      180          185          190
Ala Glu Leu Lys Lys Lys Asp Glu Phe Gln Arg Thr Lys Leu Leu
      195          200          205
Asn Gly Pro Gly Asp Val Glu Thr Gly Thr Ser Ile Thr Val Pro Gln
      210          215          220
Lys Lys Trp Leu His Phe Ile Ser Pro Ile Phe Val Gln Ala Leu Thr
      225          230          235          240
Leu Thr Phe Leu Ala Glu Trp Gly Asp Arg Ser Gln Leu Thr Thr Ile
      245          250          255
Val Leu Ala Ala Arg Glu Asp Pro Tyr Gly Val Ala Val Gly Gly Thr
      260          265          270
Val Gly His Cys Leu Cys Thr Gly Leu Ala Val Ile Gly Gly Arg Met
      275          280          285
Ile Ala Gln Lys Ile Ser Val Arg Thr Val Thr Ile Ile Gly Gly Ile
      290          295          300
Val Phe Leu Ala Phe Ala Phe Ser Ala Leu Phe Ile Ser Pro Asp Ser
      305          310          315          320
Gly Phe

```

&lt;210&gt; 3471

&lt;211&gt; 2335

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3471

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180

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<210> 3472

<211> 631

<212> PRT

<213> Homo sapiens

<400> 3472

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Val	Val	Ala	Thr	Ala	Asp	Gly	Ser	Ser	Ala	Ser	Pro	Val	Gln	Phe	Tyr
		20						25					30		
Lys	Val	Cys	Val	Ser	Val	Val	Ser	Glu	Lys	Cys	Arg	Ile	Asp	Thr	Glu
		35					40					45			
Ile	Leu	Pro	Ser	Leu	Phe	Met	Arg	Cys	Thr	Thr	Asp	Leu	Asn	Arg	Lys
	50					55					60				
Asp	Lys	Phe	Pro	Ala	Ile	Thr	His	Leu	Lys	Phe	Leu	Ala	Arg	Asp	Met
65				70					75					80	
Ser	Glu	Gln	Val	Leu	Cys	Ala	Ser	Ser	Gln	Thr	Ser	Ser	Ile	Val	
			85					90					95		
Glu	Cys	Trp	Ser	Leu	Arg	Lys	Glu	Gly	Leu	Pro	Val	Asn	Asn	Ile	Phe
		100					105					110			
Gln	Gln	Ile	Ser	Pro	Val	Val	Gly	Asp	Lys	Gln	Pro	Thr	Ile	Leu	Lys
		115					120					125			
Trp	Arg	Ile	Leu	Ser	Ala	Thr	Asn	Asp	Leu	Asp	Arg	Val	Ser	Ala	Val
	130					135					140				
Ala	Leu	Pro	Lys	Leu	Pro	Ile	Ser	Leu	Thr	Asn	Thr	Asp	Leu	Lys	Val
145				150					155					160	
Ala	Ser	Asp	Thr	Gln	Phe	Tyr	Pro	Gly	Leu	Gly	Leu	Ala	Leu	Ala	Phe
			165					170					175		
His	Asp	Gly	Ser	Val	His	Ile	Val	His	Arg	Leu	Ser	Leu	Gln	Thr	Met
		180						185				190			
Ala	Val	Phe	Tyr	Ser	Ser	Ala	Ala	Pro	Arg	Pro	Val	Asp	Glu	Pro	Ala
	195					200						205			
Met	Lys	Arg	Pro	Arg	Thr	Ala	Gly	Pro	Ala	Val	His	Leu	Lys	Ala	Met
	210					215					220				
Gln	Leu	Ser	Trp	Thr	Ser	Leu	Ala	Leu	Val	Gly	Ile	Asp	Ser	His	Gly

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<210> 3473
<211> 1660
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3473

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ctggattttc acaaaggggt ctgaaccttg gctgttggcg agggcaaagt gggcgtggcg  
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<210> 3474

<211> 474

<212> PRT

<213> Homo sapiens

<400> 3474

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Ile	Ser	Gly	Leu	Leu	Leu	Cys	Arg	Trp	Thr	Cys	Arg	His	Cys	Cys	Gln
			20					25					30		
Lys	Cys	Tyr	Glu	Ser	Ser	Cys	Cys	Gln	Ser	Ser	Glu	Asp	Glu	Val	Glu
		35					40					45			
Ile	Leu	Gly	Pro	Phe	Pro	Ala	Gln	Thr	Pro	Pro	Trp	Leu	Met	Ala	Ser
	50					55					60				
Arg	Ser	Ser	Asp	Lys	Asp	Gly	Asp	Ser	Val	His	Thr	Ala	Ser	Glu	Val
65				70						75				80	
Pro	Leu	Thr	Pro	Arg	Thr	Asn	Ser	Pro	Asp	Gly	Arg	Arg	Ser	Ser	Ser
				85					90					95	
Asp	Thr	Ser	Lys	Ser	Thr	Tyr	Ser	Leu	Thr	Arg	Arg	Ile	Ser	Ser	Leu
			100					105					110		
Glu	Ser	Arg	Arg	Pro	Ser	Ser	Pro	Leu	Ile	Asp	Ile	Lys	Pro	Ile	Glu
		115					120					125			
Phe	Gly	Val	Leu	Ser	Ala	Lys	Lys	Glu	Pro	Ile	Gln	Pro	Ser	Val	Leu
	130					135					140				
Arg	Arg	Thr	Tyr	Asn	Pro	Asp	Asp	Tyr	Phe	Arg	Lys	Phe	Glu	Pro	His
145				150						155				160	
Leu	Tyr	Ser	Leu	Asp	Ser	Asn	Ser	Asp	Asp	Val	Asp	Ser	Leu	Thr	Asp
			165						170					175	
Glu	Glu	Ile	Leu	Ser	Lys	Tyr	Gln	Leu	Gly	Met	Leu	His	Phe	Ser	Thr
		180					185					190			
Gln	Tyr	Asp	Leu	Leu	His	Asn	His	Leu	Thr	Val	Arg	Val	Ile	Glu	Ala
	195					200						205			
Arg	Asp	Leu	Pro	Pro	Pro	Ile	Ser	His	Asp	Gly	Ser	Arg	Gln	Asp	Met
	210					215					220				
Ala	His	Ser	Asn	Pro	Tyr	Val	Lys	Ile	Cys	Leu	Leu	Pro	Asp	Gln	Lys
225				230						235				240	
Asn	Ser	Lys	Gln	Thr	Gly	Val	Lys	Arg	Lys	Thr	Gln	Lys	Pro	Val	Phe
			245						250					255	
Glu	Glu	Arg	Tyr	Thr	Phe	Glu	Ile	Pro	Phe	Leu	Glu	Ala	Gln	Arg	Arg
		260					265					270			
Thr	Leu	Leu	Thr	Thr	Val	Val	Asp	Phe	Asp	Lys	Phe	Ser	Arg	His	Cys
	275					280						285			
Val	Ile	Gly	Lys	Val	Ser	Val	Pro	Leu	Cys	Glu	Val	Asp	Leu	Val	Lys
	290					295					300				
Gly	Gly	His	Trp	Trp	Lys	Ala	Leu	Ile	Pro	Ser	Ser	Gln	Asn	Glu	Val
305				310					315					320	
Glu	Leu	Gly	Glu	Leu	Leu	Leu	Ser	Leu	Asn	Tyr	Leu	Pro	Ser	Ala	Gly

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          325          330          335
Arg Leu Asn Val Asp Val Ile Arg Ala Lys Gln Leu Leu Gln Thr Asp
          340          345          350
Val Ser Gln Gly Ser Asp Pro Phe Val Lys Ile Gln Leu Val His Gly
          355          360          365
Leu Lys Leu Val Lys Thr Lys Lys Thr Ser Phe Leu Arg Gly Thr Ile
          370          375          380
Asp Pro Phe Tyr Asn Glu Ser Phe Ser Phe Lys Val Pro Gln Glu Glu
385          390          395          400
Leu Glu Asn Ala Ser Leu Val Phe Thr Val Phe Gly His Asn Met Lys
          405          410          415
Ser Ser Asn Asp Phe Ile Gly Arg Ile Val Ile Gly Gln Tyr Ser Ser
          420          425          430
Gly Pro Ser Glu Thr Asn His Trp Arg Arg Met Leu Asn Thr His Arg
          435          440          445
Thr Ala Val Glu Gln Trp His Ser Leu Arg Ser Arg Ala Glu Cys Asp
          450          455          460
Arg Val Ser Pro Ala Ser Leu Glu Val Thr
465          470

```

<210> 3475  
 <211> 514  
 <212> DNA  
 <213> Homo sapiens

```

<400> 3475
acgcgtctgg agggctggtt cttctgcacg cccgcccgcg agctgctctg gctggtgctg
60
cagcccttct tctactcact acggccgctc tgcgtccacc ccaaggccgt gaccgcatg
120
gaggtgctca acacgctggt gcagctggcg gccgacctgg ccattcttgc cctttggggg
180
ctcaagcccg tgggtctacct gctggccagc tccttctctg gcctgggcct gcaccccatc
240
tcggggccact tcgtggccga gcaactacatg ttcttcaagg gccacgagac ctactcctac
300
tatgggcctc tcaactggat caccttcaat gtgggctacc acgtggagca ccacgacttc
360
cccagcatcc cgggctacaa cctgccgctg gtgcggaaga tcgcgcccga gtactacgac
420
cacctgccgc agcaccactc ctgggtgaag gtgctctggg attttgtgtt tgaggactcc
480
ctggggccct atgccagggt gaagcgggtg taca
514

```

<210> 3476  
 <211> 171  
 <212> PRT  
 <213> Homo sapiens

```

<400> 3476
Thr Arg Leu Glu Gly Trp Phe Phe Cys Thr Pro Ala Arg Lys Leu Leu
1          5          10          15
Trp Leu Val Leu Gln Pro Phe Phe Tyr Ser Leu Arg Pro Leu Cys Val

```

```

                20                25                30
His Pro Lys Ala Val Thr Arg Met Glu Val Leu Asn Thr Leu Val Gln
      35                40                45
Leu Ala Ala Asp Leu Ala Ile Phe Ala Leu Trp Gly Leu Lys Pro Val
      50                55                60
Val Tyr Leu Leu Ala Ser Ser Phe Leu Gly Leu Gly Leu His Pro Ile
      65                70                75                80
Ser Gly His Phe Val Ala Glu His Tyr Met Phe Leu Lys Gly His Glu
      85                90                95
Thr Tyr Ser Tyr Tyr Gly Pro Leu Asn Trp Ile Thr Phe Asn Val Gly
      100               105               110
Tyr His Val Glu His His Asp Phe Pro Ser Ile Pro Gly Tyr Asn Leu
      115               120               125
Pro Leu Val Arg Lys Ile Ala Pro Glu Tyr Tyr Asp His Leu Pro Gln
      130               135               140
His His Ser Trp Val Lys Val Leu Trp Asp Phe Val Phe Glu Asp Ser
      145               150               155               160
Leu Gly Pro Tyr Ala Arg Val Lys Arg Val Tyr
      165               170

```

&lt;210&gt; 3477

&lt;211&gt; 356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3477

```

gcgcgcctcg gctgcctgcc cggcggtctc cgggtcctcg tccagaccgg ccaccggagc
60
ttgacctctt gcatcgaccc ttccatggga cttaatgaag agcagaaaga atttcaaaaa
120
gtggcctttg actttgctgc ccgagagatg gctccaaata tggcagagtg ggaccagaag
180
gtaggcgttt ttcttgctgt tagacgttct aacaacagat gtctcaggca gacctttatc
240
tttgtctccc gataatgtaa ttgttaaag tctcctccac ttaccaactc ttactgcaag
300
tgagaatacc ggtagtggat gatttttctt agaaggcatc ctgatcatct tgtaca
356

```

&lt;210&gt; 3478

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3478

```

Met Ile Arg Met Pro Ser Arg Lys Asn His Pro Leu Pro Val Phe Ser
  1                5                10                15
Leu Ala Val Arg Val Gly Lys Trp Arg Arg His Leu Thr Ile Thr Leu
      20                25                30
Ser Gly Asp Lys Asp Lys Gly Leu Pro Glu Thr Ser Val Val Arg Thr
      35                40                45
Ser Lys His Lys Lys Asn Ala Tyr Leu Leu Val Pro Leu Cys His Ile
      50                55                60
Trp Ser His Leu Ser Gly Ser Lys Val Lys Gly His Phe Leu Lys Phe

```

```

65          70          75          80
Phe Leu Leu Phe Ile Lys Ser His Gly Arg Val Asp Ala Gly Gly Gln
          85          90          95
Ala Pro Val Ala Gly Leu Asp Glu Asp Pro Glu Thr Ala Gly Gln Ala
          100          105          110
Ala Glu Ala Arg
          115

```

<210> 3479  
 <211> 797  
 <212> DNA  
 <213> Homo sapiens

```

<400> 3479
nctttccaac ccagcctgaa ggggaaagcc acctcggagg acaccctcaa tctaaggaga
60
tacccccggct ctgacaggat catgctgcag aagtggcaga aaagggacat cagcaatttt
120
gagtatctca tgtacctcaa caccgcggtt gggagaacct gcaatgacta catgcagtac
180
ccagtgttcc cctgggtcct cgcagactac acctcagaga cattgaactt ggcaaaccg
240
aagattttcc gggatctttc aaagcccatg ggggctcaga ccaaggaaag gaagctgaaa
300
tttatccaga gggttaaaga agttgagaaa actgaaggag acatgactgc ccagtgccac
360
tactacccc actactcctc ggccatcctc gtggcctcct acctgggtccg gatgccaccc
420
ttcaccaggg ccttctgcgc tctgcagggt agctgctgcc actctctgta cacacacaca
480
cacacacaca cacacacata cgctgtatc acaagactaa gacctgtgct tgaacaaaga
540
caggatgcct ctgctaaaaa cttagtcatt agccagtgat tcccagttga cattgggtcc
600
aggattctgg ctcaccagcc aaggcagggt gttcttcctc agttacacct gcacatctgc
660
ccaacaaagt cttgcaaaat gattctaaaa aataagaaat gagacatgaa aaaaatgatt
720
taacataaat aagatttagt ggaaaaagaa aaagcaggaa acttgagagac tagaaaggca
780
ggcgggtcaag gattaga
797

```

<210> 3480  
 <211> 192  
 <212> PRT  
 <213> Homo sapiens

```

<400> 3480
Xaa Phe Gln Pro Ser Leu Lys Gly Lys Ala Thr Ser Glu Asp Thr Leu
1          5          10          15
Asn Leu Arg Arg Tyr Pro Gly Ser Asp Arg Ile Met Leu Gln Lys Trp
          20          25          30
Gln Lys Arg Asp Ile Ser Asn Phe Glu Tyr Leu Met Tyr Leu Asn Thr

```

35	40	45
Ala Ala Gly Arg Thr Cys Asn Asp Tyr Met Gln Tyr Pro Val Phe Pro		
50	55	60
Trp Val Leu Ala Asp Tyr Thr Ser Glu Thr Leu Asn Leu Ala Asn Pro		
65	70	75
Lys Ile Phe Arg Asp Leu Ser Lys Pro Met Gly Ala Gln Thr Lys Glu		80
85	90	95
Arg Lys Leu Lys Phe Ile Gln Arg Phe Lys Glu Val Glu Lys Thr Glu		
100	105	110
Gly Asp Met Thr Ala Gln Cys His Tyr Tyr Thr His Tyr Ser Ser Ala		
115	120	125
Ile Ile Val Ala Ser Tyr Leu Val Arg Met Pro Pro Phe Thr Gln Ala		
130	135	140
Phe Cys Ala Leu Gln Val Ser Cys Cys His Ser Leu Tyr Thr His Thr		
145	150	155
His Thr His Thr His Thr Tyr Ala Cys Ile Thr Arg Leu Arg Pro Val		160
165	170	175
Leu Glu Gln Arg Gln Asp Ala Ser Ala Lys Asn Leu Val Ile Ser Gln		
180	185	190

&lt;210&gt; 3481

&lt;211&gt; 1794

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3481

```

nncaacgtgg tcaccacctc acgaactata agaagcgtgt ggcagccttg gaagccacgc
60
aaaagcccag cacttcccag agccagggac tgacacaaca gaaagtctgc aagcaatgcc
120
atgaggtcct gaccagaggg tcttctgcc atgcctcaa gtggcacca cctcagctct
180
gcagaccctg cgtgtgctgg agccaccatg gagagtaggt gctacggctg cgctgtcaag
240
ttcaccctct tcaagaagga gtacggctgt aagaattgtg gcaggngctt ctgttcaggc
300
tgcctaagct tcagtgcagc agtgccctcg actgggaaca cccaacagaa agtctgcaag
360
caatgccatg aggtcctgac cagagggctt tctgccaatg cctccaagtg gtcaccacct
420
cagaactata agaagcgtgt ggcagccttg gaagccaagc aaaagcccag cacttcccag
480
agccagggac tgacacgaca agaccagatg attgctgagc gcctagcacg actccgccag
540
gagaacaagc ccaagttagt cccctcacag gcagagatag aggcacggct ggctgcctta
600
aaggatgaac gtcaggggtc catcccttcc acccaggaaa tggaggcacg acttgcacgc
660
ttgcagggca gattctacc ttctcaaacc cccagcccgc gcacatcaca caccggacac
720
caggacccaa gcccagcaga cacaggatct gctaacgcag ctggcagctg aggtggctat
780
cgatgaaagc tggaaaggag gaggcccagc tgcctctctc cagaatgatc tcaaccaggg
840

```

tggcccaggg agcactaatt ccaagaggca ggccacttgg ttcttgagga aggagaagag  
 900  
 cagactgctg gctgaggcag cacttgagtt gcgggaggag aacacgaggc aggaacggat  
 960  
 tctggccctg gccaaagcgac tagccatgct gcggggacag gaccccgaga gagtgaccct  
 1020  
 ccaggactat cgcctcccag acagtgatga cgacgaggat gaggagacag ccatccaaag  
 1080  
 agtcctgcag cagctcactg aagaagcttc cctggatgag gcaagtggct ttaacatccc  
 1140  
 tgcagagcag gcttctcgac cctggacgca accccgcggg gcagagcctg agggccagga  
 1200  
 tgtggacccc aggctgagg ctgaggaaga ggagctcccc tgggtgctgca tctgcaatga  
 1260  
 ggatgccacc ctacgtgcg ctggctgcga tggggacctc ttctgtgccg gctgcttccg  
 1320  
 agagggccat gatgcctttg agcttaaaga gcaccagaca tctgcctact ctctccacg  
 1380  
 tgcaggccaa gagcactgaa gacaccctgg tcctcccgga agggcagtcc cacaggcagc  
 1440  
 ggcacccatt tctgggcccc gccacaggac gtccgatggg agagcttgct tggctctact  
 1500  
 gatgatggat agggcccttc ctgagccttg gtgtccctgg aatgaggaaa gattctccat  
 1560  
 tcgagagaat gactgggagg gaagaagtcg gggccctcct attagaagcc cagactggaa  
 1620  
 gtgagaggca tgatggggag agaccagact gaatctacgg gtgagccctg taacctggct  
 1680  
 ctagggcaca ggcccctccc ctggcactta gtgggtctaa taaagtatgt tgattcattg  
 1740  
 ggaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa  
 1794

&lt;210&gt; 3482

&lt;211&gt; 206

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3482

Met	Pro	Pro	Ser	Gly	His	His	Leu	Ser	Ser	Ala	Asp	Pro	Ala	Val	Leu
1				5				10					15		
Gly	Ala	Thr	Met	Glu	Ser	Arg	Cys	Tyr	Gly	Cys	Ala	Val	Lys	Phe	Thr
			20					25					30		
Leu	Phe	Lys	Lys	Glu	Tyr	Gly	Cys	Lys	Asn	Cys	Gly	Arg	Xaa	Phe	Cys
		35					40					45			
Ser	Gly	Cys	Leu	Ser	Phe	Ser	Ala	Ala	Val	Pro	Arg	Thr	Gly	Asn	Thr
	50					55					60				
Gln	Gln	Lys	Val	Cys	Lys	Gln	Cys	His	Glu	Val	Leu	Thr	Arg	Gly	Ser
65				70					75					80	
Ser	Ala	Asn	Ala	Ser	Lys	Trp	Ser	Pro	Pro	Gln	Asn	Tyr	Lys	Lys	Arg
			85					90					95		
Val	Ala	Ala	Leu	Glu	Ala	Lys	Gln	Lys	Pro	Ser	Thr	Ser	Gln	Ser	Gln
			100					105					110		
Gly	Leu	Thr	Arg	Gln	Asp	Gln	Met	Ile	Ala	Glu	Arg	Leu	Ala	Arg	Leu

```

      115      120      125
Arg Gln Glu Asn Lys Pro Lys Leu Val Pro Ser Gln Ala Glu Ile Glu
      130      135      140
Ala Arg Leu Ala Ala Leu Lys Asp Glu Arg Gln Gly Ser Ile Pro Ser
145      150      155      160
Thr Gln Glu Met Glu Ala Arg Leu Ala Ala Leu Gln Gly Arg Val Leu
      165      170      175
Pro Ser Gln Thr Pro Gln Pro Gly Thr Ser His Thr Gly His Gln Asp
      180      185      190
Pro Ser Pro Ala Asp Thr Gly Ser Ala Asn Ala Ala Gly Ser
      195      200      205

```

&lt;210&gt; 3483

&lt;211&gt; 477

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3483

```

ncggccgcgg cgcggaacgg cgccctccgc cccaccatgg gcaacagcgc gagccgcaac
60
gacttcgagt ggggtctacac cgaccagccg cacacgcagc ggcgcaagga gatactggcc
120
aagtaccggg ccatcaaggc cctgatgcgg ccagaccgcg gcctcaagtg ggcggggctg
180
gtgctggtgc tgggtgcagat gctggcctgc tggttggtgc gcgggctggc ctggcgctgg
240
ctgctgttct gggcctacgc ctttggtggc tgcgtgaacc actcgctgac gctggccatc
300
cacgacatct cgacacaacgc ggccttcggc acggggccgtg cggcacgcaa ccgctggctg
360
gccgtgttcg ccaacctgcc cgtgggtgtg ccctacgccg cctccttcaa gaagtaccac
420
gtggaccacc accgctacct gggcgggcgac ggactggacg tggacgtgcc cacgcgt
477

```

&lt;210&gt; 3484

&lt;211&gt; 147

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3484

```

Met Gly Asn Ser Ala Ser Arg Asn Asp Phe Glu Trp Val Tyr Thr Asp
1      5      10      15
Gln Pro His Thr Gln Arg Arg Lys Glu Ile Leu Ala Lys Tyr Pro Ala
20      25      30
Ile Lys Ala Leu Met Arg Pro Asp Pro Arg Leu Lys Trp Ala Gly Leu
35      40      45
Val Leu Val Leu Val Gln Met Leu Ala Cys Trp Leu Val Arg Gly Leu
50      55      60
Ala Trp Arg Trp Leu Leu Phe Trp Ala Tyr Ala Phe Gly Gly Cys Val
65      70      75      80
Asn His Ser Leu Thr Leu Ala Ile His Asp Ile Ser His Asn Ala Ala
85      90      95
Phe Gly Thr Gly Arg Ala Ala Arg Asn Arg Trp Leu Ala Val Phe Ala

```

100 105 110  
 Asn Leu Pro Val Gly Val Pro Tyr Ala Ala Ser Phe Lys Lys Tyr His  
 115 120 125  
 Val Asp His His Arg Tyr Leu Gly Gly Asp Gly Leu Asp Val Asp Val  
 130 135 140  
 Pro Thr Arg  
 145

<210> 3485  
 <211> 812  
 <212> DNA  
 <213> Homo sapiens

<400> 3485  
 tatttattta tagtcacaaa aactgttcag gaagaaatgt tatgaaaaga acatttttac  
 60  
 tgcagtctta aaacatttaa ttttctatta tacagttaaa catttgcttg aattcagtga  
 120  
 gtctaaaaaa tcttattgtt ctcaggtag cagttagtgt agcagagtcc attggtgaag  
 180  
 caatctagtt attggcaaat tctaacacat ggtaaggtgt gggggaaagg atttaaaata  
 240  
 acagaaaaat gtaagtacaa acatacataa cagcaaaata aaactcactt taacaaaaat  
 300  
 ttatttaaaa tggtaccccc atatttcctc aatgaccaac ttgtttcagt tttatctccc  
 360  
 cctcatccgg ttattttatg tctttttggg aggaaggagg atgagggttt ttgtttttta  
 420  
 acaaaatcac tggtttttta aaaagtgtta ctgcagtcac ttataagatg catgttatgt  
 480  
 ggaagtgata cctgagttgt ttgcatgggc aatggaagag gcagcagctc tgaaaggagt  
 540  
 atgagtccag aaaaaaatcc ttcaggaacc ttcaagattg aagaaagaac ttcttttaac  
 600  
 attaaagacc aagtattatt ggccagagtc tcttctgaga ttgtgagttt ttcattaact  
 660  
 ccttgtgtaa aagtcagtaa aatatcaatg atatcattct gaattttctg ttcatcacta  
 720  
 tccaaacgac ctgagagggg gatagagcac aggagcatat gtaaagtaac aagcgctgaa  
 780  
 ggaacacgca tgccttaaa ctcaaaggat cc  
 812

<210> 3486  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 3486  
 Met Arg Val Pro Ser Ala Leu Val Thr Leu His Met Leu Leu Cys Ser  
 1 5 10 15  
 Ile Pro Leu Ser Gly Arg Leu Asp Ser Asp Glu Gln Lys Ile Gln Asn  
 20 25 30  
 Asp Ile Ile Asp Ile Leu Leu Thr Phe Thr Gln Gly Val Asn Glu Lys

```

      35          40          45
Leu Thr Ile Ser Glu Glu Thr Leu Ala Asn Asn Thr Trp Ser Leu Met
      50          55          60
Leu Lys Glu Val Leu Ser Ser Ile Leu Lys Val Pro Glu Gly Phe Phe
      65          70          75          80
Ser Gly Leu Ile Leu Leu Ser Glu Leu Leu Pro Leu Pro Leu Pro Met
      85          90          95
Gln Thr Thr Gln Val Ser Leu Pro His Asn Met His Leu Ile Asn Asp
      100          105          110
Cys Ser Asn Thr Phe
      115

```

<210> 3487  
 <211> 772  
 <212> DNA  
 <213> Homo sapiens

```

<400> 3487
nnattgtatc aaaatcctag atttgaataa cttattattt taaataatca gtaactaaaa
60
ccaagcaatc catcacacaa agaggggaaa gggtaatatt ctgagttata aattttttac
120
cctgtctgat aaaaatagaa gcctgaaagt ttaaattttt cctggattta aatttaaaga
180
taaatttggt tttcagttaa atatcctcaa tagcaatttt accaaagagg ctttcttctg
240
aaggccacct ctgaaataat tagaggataa atgtcaatgg catgatatta agatattact
300
tggccaggcg tggtcgtcac gcgtgtaatc ccagcacttt gggaggccga ggcaggtgga
360
tcacgaggtc aagaaatcga gaccagcctg gctaacacag tgaaaccccg tctcattctg
420
agcttcttga caccttttaa tccagtcact gaaattagca tctgcaccta gaaagaaaaa
480
actgactata acatcactca tctgcacaac ctattaatca gcaaatactt actgaatacc
540
tactacatcc caggcagtgt tctaggcact ggggagtcgg cagcgaacaa aacctgtctt
600
aacagacctt atcaccaact ctactatagt tataaacata ccaatagttt aacatttagt
660
tgttaatcat gaaacatttt gattttttta aaattttaac tacagtcaac cttaatttca
720
cagatacaaa taatctgcat ttcccccaat cccgctgctc ttagagaagc tt
772

```

<210> 3488  
 <211> 59  
 <212> PRT  
 <213> Homo sapiens

```

<400> 3488
Asp Ile Thr Trp Pro Gly Val Val Val Thr Arg Val Ile Pro Ala Leu
1          5          10          15
Trp Glu Ala Glu Ala Gly Gly Ser Arg Gly Gln Glu Ile Glu Thr Ser

```

```

                20                25                30
Leu Ala Asn Thr Val Lys Pro Arg Leu Ile Leu Ser Phe Leu Thr Pro
                35                40                45
Phe Asn Pro Val Thr Glu Ile Ser Ile Cys Thr
                50                55

```

<210> 3489  
 <211> 288  
 <212> DNA  
 <213> Homo sapiens

```

<400> 3489
tagctaacac tccactatgg gagcccatct cctcccaggg ccagggagac cagggagacc
60
agggagacca ggtctggccc ccaactctaa ggctcatctt agaggcgaga ttcaggccca
120
gcccagggtg ccccatgagg cctggtggtt ggaggcagag ggtatccctt gcccaaattc
180
gtgccacatt cacagtcact gggaaagcta cggggatggg ccgggcgcgg tggctcacac
240
ctgtaatccc agcactttgg agagccccaa gacgacggat cacgagtc
288

```

<210> 3490  
 <211> 90  
 <212> PRT  
 <213> Homo sapiens

```

<400> 3490
Met Gly Ala His Leu Leu Pro Gly Pro Gly Arg Pro Gly Arg Pro Gly
1          5          10          15
Arg Pro Gly Leu Ala Pro Asn Ser Lys Ala His Leu Arg Gly Glu Ile
          20          25          30
Gln Ala Gln Pro Arg Val Pro His Glu Ala Trp Trp Leu Glu Ala Glu
          35          40          45
Gly Ile Pro Cys Pro Asn Ser Cys His Ile His Ser His Trp Glu Ser
          50          55          60
Tyr Gly Asp Gly Pro Gly Ala Val Ala His Thr Cys Asn Pro Ser Thr
65          70          75          80
Leu Glu Ser Pro Lys Thr Thr Asp His Glu
          85          90

```

<210> 3491  
 <211> 568  
 <212> DNA  
 <213> Homo sapiens

```

<400> 3491
gggaaccgac gtcctctgt ggtgaaattc cacccttca cgccgtgcat cgccgtagcc
60
gacaaggaca gcatctgctt ttgggactgg gagaaagggg agaagctgga ttatttccac
120
aatgggaacc ctcggtacac gagggtcact gccatggagt atctgaatgg ccaggactgc
180

```

tcgcttctgc tgacggccac agacgatggg gccatcaggg tctggaagaa ttttctgat  
 240  
 ttggaaaaga acccagagat ggtgaccgcg tggcaggggc tctcggacat gctgccaacg  
 300  
 acgcgaggag ctgggatggg ggtggactgg gagcaggaga ccggcctcct catgagctca  
 360  
 ggagacgtgc ggatcgctcg gatctgggac acagaccgtg agatgaagggt gcaggacatc  
 420  
 cctacgggcg cagacagctg tgtgacgagt ctgtcctgtg attcccacg ctcaactcatc  
 480  
 gtggctggcc tcggtgacgg ctccatccgc gtctacgaca gaaggatggc actcagcgaa  
 540  
 tgccgcgtca tgacgtaccg ggagcaca  
 568

<210> 3492

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3492

Gly	Asn	Arg	Arg	Pro	Ser	Val	Val	Lys	Phe	His	Pro	Phe	Thr	Pro	Cys
1				5				10					15		
Ile	Ala	Val	Ala	Asp	Lys	Asp	Ser	Ile	Cys	Phe	Trp	Asp	Trp	Glu	Lys
		20						25					30		
Gly	Glu	Lys	Leu	Asp	Tyr	Phe	His	Asn	Gly	Asn	Pro	Arg	Tyr	Thr	Arg
		35					40					45			
Val	Thr	Ala	Met	Glu	Tyr	Leu	Asn	Gly	Gln	Asp	Cys	Ser	Leu	Leu	Leu
	50					55				60					
Thr	Ala	Thr	Asp	Asp	Gly	Ala	Ile	Arg	Val	Trp	Lys	Asn	Phe	Ala	Asp
65					70				75					80	
Leu	Glu	Lys	Asn	Pro	Glu	Met	Val	Thr	Ala	Trp	Gln	Gly	Leu	Ser	Asp
			85					90					95		
Met	Leu	Pro	Thr	Thr	Arg	Gly	Ala	Gly	Met	Val	Val	Asp	Trp	Glu	Gln
			100					105					110		
Glu	Thr	Gly	Leu	Leu	Met	Ser	Ser	Gly	Asp	Val	Arg	Ile	Val	Arg	Ile
		115					120					125			
Trp	Asp	Thr	Asp	Arg	Glu	Met	Lys	Val	Gln	Asp	Ile	Pro	Thr	Gly	Ala
	130					135					140				
Asp	Ser	Cys	Val	Thr	Ser	Leu	Ser	Cys	Asp	Ser	His	Arg	Ser	Leu	Ile
145					150				155					160	
Val	Ala	Gly	Leu	Gly	Asp	Gly	Ser	Ile	Arg	Val	Tyr	Asp	Arg	Arg	Met
			165					170					175		
Ala	Leu	Ser	Glu	Cys	Arg	Val	Met	Thr	Tyr	Arg	Glu	His			
			180					185							

<210> 3493

<211> 2244

<212> DNA

<213> Homo sapiens

<400> 3493

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 60

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&lt;210&gt; 3494

&lt;211&gt; 628

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3494

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Ala	Ser	His	His	Ser	Gly	Ser	Asp	Asn	His	Ser	Glu	Arg	Ser	Asp	Asn
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Arg	Ala	Gln	Gly	Ser	Asp	Glu	Asp	Lys	Leu	Gln	Asn	Ser	Asp	Asp	Asp
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Glu	Lys	Met	Gln	Asn	Thr	Asp	Asp	Glu	Glu	Arg	Pro	Gln	Leu	Ser	Asp
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			165					170						175	
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	275	280
Gly Glu Asp Lys Pro Pro Thr Pro Gly Gln Pro Val Asp Glu Asn Gly		285
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Glu Val Glu Ile Pro Lys Val Asn Thr Asp Leu Gly Asn Asp Leu Tyr		320
	325	330
Phe Val Lys Leu Pro Asn Phe Leu Ser Val Glu Pro Arg Pro Phe Asp		335
	340	345
Pro Gln Tyr Tyr Glu Asp Glu Phe Glu Asp Glu Glu Met Leu Asp Glu		350
	355	360
Glu Gly Arg Thr Arg Leu Lys Leu Lys Val Glu Asn Thr Ile Arg Trp		365
	370	375
Arg Ile Arg Arg Asp Glu Glu Gly Asn Glu Ile Lys Glu Ser Asn Ala		380
385	390	395
Arg Ile Val Lys Trp Ser Asp Gly Ser Met Ser Leu His Leu Gly Asn		400
	405	410
Glu Val Phe Asp Val Tyr Lys Ala Pro Leu Gln Gly Asp His Asn His		415
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Leu Phe Ile Arg Gln Gly Thr Gly Leu Gln Gly Gln Ala Val Phe Lys		430
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Ala Lys Leu Thr Phe Arg Pro His Ser Thr Asp Ser Ala Thr His Arg		445
	450	455
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465	470	475
Arg Ile Leu Pro Met Ala Gly Arg Asp Pro Glu Cys Gln Arg Thr Glu		480
	485	490
Met Ile Lys Lys Glu Glu Glu Arg Leu Arg Ala Ser Ile Arg Arg Glu		495
	500	505
Ser Gln Gln Arg Arg Met Arg Glu Lys Gln His Gln Arg Gly Leu Ser		510
	515	520
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	530	535
Glu Ser Ile Ser Leu Ala Ala Ile Lys Asn Arg Tyr Lys Gly Gly Ile		540
545	550	555
Arg Glu Glu Arg Ala Arg Ile Tyr Ser Ser Asp Ser Asp Glu Gly Ser		560
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Glu Glu Asp Lys Ala Gln Arg Leu Leu Lys Ala Lys Lys Leu Thr Ser		575
	580	585
Asp Glu Glu Gly Glu Pro Ser Gly Lys Arg Lys Ala Glu Asp Asp Asp		590
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Glu Asp Asp Asp		620
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<210> 3495  
 <211> 1085  
 <212> DNA  
 <213> Homo sapiens

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 180  
 aagaacccgg atgagggcga gaagttttaa ctcatatccc aggcataatga agtgctttca  
 240  
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<210> 3496  
 <211> 337  
 <212> PRT  
 <213> Homo sapiens

<400> 3496  
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Asp Gln Gly Gly Glu Gln Ala Ile Lys Glu Gly Gly Ser Gly Ser Pro
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Ser Phe Ser Ser Pro Met Asp Ile Phe Asp Met Phe Phe Gly Gly Gly
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Gly Arg Met Ala Arg Glu Arg Arg Gly Lys Asn Val Val His Gln Leu
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Ser Val Thr Leu Glu Asp Leu Tyr Asn Gly Val Thr Lys Lys Leu Ala
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Leu Gln Lys Asn Val Ile Cys Glu Lys Cys Glu Gly Val Gly Gly Lys
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Lys Gly Ser Val Glu Lys Cys Pro Leu Cys Lys Gly Arg Gly Met Gln
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Ile His Ile Gln Gln Ile Gly Pro Gly Met Val Gln Gln Ile Gln Thr
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Val Cys Ile Glu Cys Lys Gly Gln Gly Glu Arg Ile Asn Pro Lys Asp
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Arg Cys Glu Ser Cys Ser Gly Ala Lys Val Ile Arg Glu Lys Lys Ile
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Phe His Gly Glu Gly Asp Gln Glu Pro Glu Leu Glu Pro Gly Asp Val
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Ile Ile Val Leu Asp Gln Lys Asp His Ser Val Phe Gln Arg Arg Gly
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His Asp Leu Ile Met Lys Met Lys Ile Gln Leu Ser Glu Ala Leu Cys
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Gly Phe Lys Lys Thr Ile Lys Thr Leu Asp Asn Arg Ile Leu Val Ile
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Thr Ser Lys Ala Gly Glu Val Ile Lys His Gly Asp Leu Arg Cys Val
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Arg Asp Glu Gly Met Pro Ile Tyr Lys Ala Pro Leu Glu Lys Gly Ile
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Leu Ile Ile Gln Phe Leu Val Ile Phe Pro Xaa Lys His Trp Leu Ser
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Leu

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&lt;210&gt; 3497

&lt;211&gt; 1638

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3497

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180

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&lt;210&gt; 3498

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3498

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 Cys Cys Cys Cys Ser Cys Ser Cys Leu Thr Val Arg Asn Glu Glu Arg  
 35 40 45  
 Gly Glu Asn Ala Gly Arg Pro Thr His Thr Thr Lys Met Glu Ser Ile  
 50 55 60  
 Gln Val Leu Glu Glu Cys Gln Asn Pro Thr Ala Glu Glu Val Leu Ser  
 65 70 75 80  
 Trp Ser Gln Asn Phe Asp Lys Met Met Lys Ala Pro Ala Gly Arg Asn  
 85 90 95  
 Leu Phe Arg Glu Phe Leu Arg Thr Glu Tyr Ser Glu Glu Asn Leu Leu  
 100 105 110  
 Phe Trp Leu Ala Cys Glu Asp Leu Lys Lys Glu Gln Asn Lys Lys Val  
 115 120 125  
 Ile Glu Glu Lys Ala Arg Met Ile Tyr Glu Asp Tyr Ile Ser Ile Leu  
 130 135 140  
 Ser Pro Lys Glu Val Ser Leu Asp Ser Arg Val Arg Glu Val Ile Asn  
 145 150 155 160  
 Arg Asn Leu Leu Asp Pro Asn Pro His Met Tyr Glu Asp Ala Gln Leu  
 165 170 175  
 Gln Ile Tyr Thr Leu Met His Arg Asp Ser Phe Pro Arg Phe Leu Asn  
 180 185 190  
 Ser Gln Ile Tyr Lys Ser Phe Val Glu Ser Thr Ala Gly Ser Ser Ser  
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 Glu Ser  
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&lt;210&gt; 3499

&lt;211&gt; 732

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3499

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<210> 3500

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3500

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			20					25					30		
Ala	Ser	Thr	Gly	Lys	Gln	Gly	Ala	Pro	Gly	Pro	Asp	Trp	Ala	Cys	Ile
			35				40					45			
Phe	His	Val	Val	Leu	Gln	Pro	Ser	Arg	His	Gly	Pro	Glu	Ala	Thr	Ala
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Ala	Pro	Gln	Ser	Pro	Pro	Thr	Pro	Ala	Val	Pro	Pro	Gly	His	Gly	Ala
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His	Asp	Ser	Gly	Pro	Gly	Gln	Arg	Gln	Arg	Gln	Gly	Ala	Gly	Ser	Thr
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Pro	Ala	Arg	Val	Pro	Val	His	Gly	Ser	Pro	Ser	Ser	Cys	Arg	Ala	Leu
			100					105					110		
Arg	Pro	Ala	Gly	Arg	Ser	Ser	Arg	Ala	Ala	Pro	Arg	Ala	Ser	Pro	Ala
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Gly	Gln	Ala	Ser	Ser	Arg	Pro	Xaa	Ser	Gly	Ala	Met	His	Arg	Leu	Gly
			130				135				140				
Glu	Gly	Asn	Arg	Ala	Gly	Glu	Lys	Val	Phe	Arg	Arg	Thr	Ala	Val	Gln
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Lys	Arg	Arg	Val	Gly	Gly	Gly	Thr								
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<210> 3501

<211> 691

<212> DNA

<213> Homo sapiens

<400> 3501

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 691

&lt;210&gt; 3502

&lt;211&gt; 196

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3502

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			20					25					30		
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Cys	Ile	Glu	Lys	Ile	Ala	Asn	Leu	Asn	Gly	Leu	Lys	Asn	Leu	Arg	Ile
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Leu	Ser	Leu	Gly	Arg	Asn	Asn	Ile	Lys	Asn	Leu	Asn	Gly	Leu	Glu	Ala
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Val	Gly	Asp	Thr	Leu	Glu	Glu	Leu	Trp	Ile	Ser	Tyr	Asn	Phe	Ile	Glu
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Lys	Leu	Lys	Gly	Ile	His	Ile	Met	Lys	Lys	Leu	Lys	Ile	Leu	Tyr	Met
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Ser	Asn	Asn	Leu	Val	Lys	Asp	Trp	Ala	Glu	Phe	Val	Lys	Leu	Ala	Glu
	130					135				140					
Leu	Pro	Cys	Leu	Glu	Asp	Leu	Val	Phe	Val	Gly	Asn	Pro	Leu	Glu	Glu
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Lys	His	Ser	Ala	Glu	Asn	Asn	Trp	Ile	Glu	Glu	Ala	Thr	Lys	Arg	Val
			165					170					175		
Pro	Lys	Leu	Lys	Lys	Leu	Asp	Gly	Thr	Pro	Val	Ile	Lys	Gly	Asp	Glu
		180					185						190		
Glu	Glu	Asp	Asn												
		195													

&lt;210&gt; 3503

&lt;211&gt; 857

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3503

gcggcgccca ggtggagcgc gtcggggcccc tggatccggg gaaacggcca aggttgcggg  
 60  
 agtctcttca ctctcgtctc aaagccattt tgtgccgctg ccgctgcctc tacggccata  
 120  
 aatgcccaga gattagcgga gaagctccga gccagaaaac gggaacaaga cacaagaag  
 180  
 gagccggtgt ccacaaacgc tgttcagcgg agagtgaag aaatagtgcg gttcacacgg  
 240  
 cagctgcagc gagtccaccc caacgtgctt gctaaggcac tgacccgagg aattctccac  
 300  
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 360  
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 420  
 aaggcagagc ccttgcatct gtgccaccgg ctggacaagg aaaccacagg tgtaatggtg  
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 540  
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 600  
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 720  
 gttgctgtaa ctcagtacca ggtgtcagc agcactctct cctccgccct cgtggagctc  
 780  
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 840  
 ccaatccttg gtgatca  
 857

&lt;210&gt; 3504

&lt;211&gt; 285

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3504

Ala	Ala	Pro	Arg	Trp	Ser	Ala	Ser	Gly	Pro	Trp	Ile	Arg	Gly	Asn	Gly
1				5					10					15	
Gln	Gly	Cys	Gly	Ser	Leu	Phe	Thr	Leu	Val	Ser	Lys	Pro	Phe	Cys	Ala
			20					25					30		
Ala	Ala	Ala	Ala	Ser	Thr	Ala	Ile	Asn	Ala	Gln	Arg	Leu	Ala	Glu	Lys
			35				40					45			
Leu	Arg	Ala	Gln	Lys	Arg	Glu	Gln	Asp	Thr	Lys	Lys	Glu	Pro	Val	Ser
	50				55					60					
Thr	Asn	Ala	Val	Gln	Arg	Arg	Val	Gln	Glu	Ile	Val	Arg	Phe	Thr	Arg
65				70					75					80	
Gln	Leu	Gln	Arg	Val	His	Pro	Asn	Val	Leu	Ala	Lys	Ala	Leu	Thr	Arg
			85					90					95		
Gly	Ile	Leu	His	Gln	Asp	Lys	Asn	Leu	Val	Val	Ile	Asn	Lys	Pro	Tyr
		100					105					110			
Gly	Leu	Pro	Val	His	Gly	Gly	Pro	Gly	Val	Gln	Leu	Cys	Ile	Thr	Asp
		115					120					125			
Val	Leu	Pro	Ile	Leu	Ala	Lys	Met	Leu	His	Gly	His	Lys	Ala	Glu	Pro

130	135	140
Leu His Leu Cys His Arg Leu Asp Lys Glu Thr Thr Gly Val Met Val		
145	150	155
Leu Ala Trp Asp Lys Asp Met Ala His Gln Val Gln Glu Leu Phe Arg		160
	165	170
Thr Arg Gln Val Val Lys Lys Tyr Trp Ala Ile Thr Val His Val Pro		175
	180	185
Met Pro Ser Ala Gly Val Val Asp Ile Pro Ile Val Glu Lys Glu Gly		190
	195	200
Gln Gly Gln Gln Gln His Pro Arg Met Thr Leu Ser Pro Ser Ser Arg		205
	210	215
Met Asp Asp Gly Lys Met Val Lys Val Arg Arg Ser Arg Asn Ala Gln		220
225	230	235
Val Ala Val Thr Gln Tyr Gln Val Leu Ser Ser Thr Leu Ser Ser Ala		240
	245	250
Leu Val Glu Leu Gln Pro Ile Thr Gly Ile Lys His Gln Leu Arg Val		255
	260	265
His Leu Ser Phe Gly Leu Asp Cys Pro Ile Leu Gly Asp		270
	275	280
		285

&lt;210&gt; 3505

&lt;211&gt; 1612

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3505

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aaggttggtg acttctgct gaaggccatc atgcgcacca tgtggttcgc cggcggttc  
240  
caccgggtgg ccgtgaagg ggcggcaggcg ctgcccaccg aggcggccat cctcacgctc  
300  
ggcctcact cgtcctactt cgacgccatc cctgtgacca tgacgatgtc ctccatcgtg  
360  
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420  
gtgttcgtgt cccggtcaga ccaggattct cgcaggaaaa cagtagaaga aatcaagaga  
480  
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720  
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840

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 900  
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 960  
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 1020  
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 1200  
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 ctggattagg acccaggggt gcggagagac gcggccctc ccgctggac atcaccgcca  
 1560  
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 1612

&lt;210&gt; 3506

&lt;211&gt; 502

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3506

Val His Glu Leu His Leu Ser Ala Leu Gln Lys Ala Gln Val Ala Leu  
 1 5 10 15  
 Met Thr Leu Thr Leu Phe Pro Val Arg Leu Leu Val Ala Ala Met  
 20 25 30  
 Met Leu Leu Ala Trp Pro Leu Ala Leu Val Ala Ser Leu Gly Ser Ala  
 35 40 45  
 Glu Lys Glu Pro Glu Gln Pro Pro Ala Leu Trp Arg Lys Val Val Asp  
 50 55 60  
 Phe Leu Leu Lys Ala Ile Met Arg Thr Met Trp Phe Ala Gly Gly Phe  
 65 70 75 80  
 His Arg Val Ala Val Lys Gly Arg Gln Ala Leu Pro Thr Glu Ala Ala  
 85 90 95  
 Ile Leu Thr Leu Ala Pro His Ser Ser Tyr Phe Asp Ala Ile Pro Val  
 100 105 110  
 Thr Met Thr Met Ser Ser Ile Val Met Lys Thr Glu Ser Arg Asp Ile  
 115 120 125  
 Pro Ile Trp Gly Thr Leu Ile Gln Tyr Ile Arg Pro Val Phe Val Ser  
 130 135 140  
 Arg Ser Asp Gln Asp Ser Arg Arg Lys Thr Val Glu Glu Ile Lys Arg  
 145 150 155 160  
 Arg Ala Gln Ser Asn Gly Lys Trp Pro Gln Ile Met Ile Phe Pro Glu

165 170 175  
 Gly Thr Cys Thr Asn Arg Thr Cys Leu Ile Thr Phe Lys Pro Gly Ala  
 180 185 190  
 Phe Ile Pro Gly Ala Pro Val His Pro Gly Val Leu Arg Tyr Pro Asn  
 195 200 205  
 Lys Leu Asp Thr Ile Thr Trp Thr Trp Gln Gly Pro Gly Ala Leu Glu  
 210 215 220  
 Ile Leu Trp Leu Thr Leu Cys Gln Phe His Asn Gln Val Glu Ile Glu  
 225 230 235 240  
 Phe Leu Pro Val Tyr Ser Pro Ser Glu Glu Glu Lys Arg Asn Pro Ala  
 245 250 255  
 Leu Tyr Ala Ser Asn Val Arg Arg Val Met Ala Glu Ala Leu Gly Val  
 260 265 270  
 Ser Val Thr Asp Tyr Thr Phe Glu Asp Cys Gln Leu Ala Leu Ala Glu  
 275 280 285  
 Gly Gln Leu Arg Leu Pro Ala Asp Thr Cys Leu Leu Glu Phe Ala Arg  
 290 295 300  
 Leu Val Arg Gly Leu Gly Leu Lys Pro Glu Lys Leu Glu Lys Asp Leu  
 305 310 315 320  
 Asp Arg Tyr Ser Glu Arg Ala Arg Met Lys Gly Gly Glu Lys Ile Gly  
 325 330 335  
 Ile Ala Glu Phe Ala Ala Ser Leu Glu Val Pro Val Ser Asp Leu Leu  
 340 345 350  
 Glu Asp Met Phe Ser Leu Phe Asp Glu Ser Gly Ser Gly Glu Val Asp  
 355 360 365  
 Leu Arg Glu Cys Val Val Ala Leu Ser Val Val Cys Trp Pro Ala Arg  
 370 375 380  
 Thr Leu Asp Thr Ile Gln Leu Ala Phe Lys Met Tyr Gly Ala Gln Glu  
 385 390 395 400  
 Asp Gly Ser Val Gly Glu Gly Asp Leu Ser Cys Ile Leu Lys Thr Ala  
 405 410 415  
 Leu Gly Val Ala Glu Leu Thr Val Thr Asp Leu Phe Arg Ala Ile Asp  
 420 425 430  
 Gln Glu Glu Lys Gly Lys Ile Thr Phe Ala Asp Phe His Arg Phe Ala  
 435 440 445  
 Glu Met Tyr Pro Ala Phe Ala Glu Glu Tyr Leu Tyr Pro Asp Gln Thr  
 450 455 460  
 His Phe Glu Ser Cys Ala Glu Thr Ser Pro Ala Pro Ile Pro Asn Gly  
 465 470 475 480  
 Phe Cys Ala Asp Phe Ser Pro Glu Asn Ser Asp Ala Gly Arg Lys Pro  
 485 490 495  
 Val Arg Lys Lys Leu Asp  
 500

&lt;210&gt; 3507

&lt;211&gt; 885

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3507

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 120

cgagcccgct ccccggcac cgtgctcaag tccactcgc tgtagtcatt gttgatgctg  
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 240  
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 480  
 gaccgcaagt tcaccatcag cctcactgcc ttctcttca tctgcccct ctccatcccc  
 540  
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 780  
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 ggcatctgtg gcttctgac ctttggagct gctgtggatc ctgac  
 885

&lt;210&gt; 3508

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3508

Leu Arg Thr Leu Leu Asn Leu Leu Phe Leu Pro Asp Gly Leu Cys Gln  
 1 5 10 15  
 Arg Arg Leu Leu Cys Glu Val Ala Ile Ala Val Tyr Thr Phe Gly Thr  
 20 25 30  
 Cys Ile Ala Phe Leu Ile Ile Ile Gly Asp Gln Gln Asp Lys Ile Ile  
 35 40 45  
 Ala Val Met Ala Lys Glu Pro Glu Gly Ala Ser Gly Pro Trp Tyr Thr  
 50 55 60  
 Asp Arg Lys Phe Thr Ile Ser Leu Thr Ala Phe Leu Phe Ile Leu Pro  
 65 70 75 80  
 Leu Ser Ile Pro Arg Glu Ile Gly Phe Gln Lys Tyr Ala Ser Phe Leu  
 85 90 95  
 Ser Val Val Gly Thr Trp Tyr Val Thr Ala Ile Val Ile Ile Lys Tyr  
 100 105 110  
 Ile Trp Pro Asp Lys Glu Met Thr Pro Gly Asn Ile Leu Thr Arg Pro  
 115 120 125  
 Ala Ser Trp Met Ala Val Phe Asn Ala Met Pro Thr Ile Cys Phe Gly  
 130 135 140  
 Phe Gln Cys His Val Ser Ser Val Pro Val Phe Asn Ser Met Gln Gln  
 145 150 155 160  
 Pro Glu Val Lys Thr Trp Gly Gly Val Val Thr Ala Ala Met Val Ile

165 170 175  
 Ala Leu Ala Val Tyr Met Gly Thr Gly Ile Cys Gly Phe Leu Thr Phe  
 180 185 190  
 Gly Ala Ala Val Asp Pro Asp  
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<210> 3509  
 <211> 331  
 <212> DNA  
 <213> Homo sapiens

<400> 3509  
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 120  
 gccctctgcg acggctcccc gaccgagggg gagctcccca cgcacgagca ggtcttcctg  
 180  
 agccccccac ctctttaaag cccccgaggg cctggggtgc cccagaagtt ggaggagcgc  
 240  
 aggcagcttg gtaaggcgcc catgggtgga gtgccctggg gctcagatgg tcaccaacgg  
 300  
 tggcaggggtg tccccacca ccctcacgcg t  
 331

<210> 3510  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 3510  
 Leu Val His Arg Thr Met Ala Gln Pro Pro Val His Asp Tyr Val Pro  
 1 5 10 15  
 Val Ser Trp Thr Ala Leu Val His Val Lys Ala Glu Tyr Phe Arg Ser  
 20 25 30  
 Leu Ala His Tyr His Val Ala Met Ala Leu Cys Asp Gly Ser Pro Thr  
 35 40 45  
 Glu Gly Glu Leu Pro Thr His Glu Gln Val Phe Leu Ser Pro Pro Pro  
 50 55 60  
 Pro Leu Ser Pro Arg Gly Pro Gly Leu Pro Gln Lys Leu Glu Glu Arg  
 65 70 75 80  
 Arg Gln Leu Gly Lys Ala Pro Met Gly Gly Val Pro Trp Gly Ser Asp  
 85 90 95  
 Gly His Gln Arg Trp Gln Gly Val Pro His His Pro His Ala  
 100 105 110

<210> 3511  
 <211> 3319  
 <212> DNA  
 <213> Homo sapiens

<400> 3511  
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120  
gatagtgacc gtaattcatc agaagaagga actgcagaga aatccaagaa actgaggact  
180  
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240  
gtattttaaatt atttgctctt tcttgaccgg gctcatgctt cacaagtttg ccgcaactgg  
300  
aaccaggtat ttcacatgcc tgacttgtgg agatgttttg aatttgaact gaatcagcca  
360  
gctacatctt atttgaaagc taccatcca gagctgatca aacagattat taaaagacat  
420  
tcaaaccatc tacaatatgt cagcttcaag gtggacagca gcaaggaatc agctgaagca  
480  
gcttgtgata tactatcgca acttgtgaat tgctctttaa aaacacttgg acttatttca  
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660  
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720  
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780  
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840  
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900  
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960  
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gaaatacctg ccacccatct gtactttggg agatcagtaa gcaaagatgt gcttggccgt  
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1140  
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1560  
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1680

cctatatggtt ataatatcca agaagtacta atagggttttc tgaaatggtta tattctctat  
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1920  
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1980  
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2160  
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2280  
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2340  
ctcacttttc tatttttgaa ttacatagtt atgtaagtaa aatttttaaa aatcataaag  
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2460  
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2940  
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3060  
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3240  
tttatcactt tgagaataaa aagttactaa tgcaaaaaaa aaaaaaaaaa aaaaaaaaaa  
3300

aaaaaaaaa aaaaaaaaaa

3319

&lt;210&gt; 3512

&lt;211&gt; 462

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3512

Xaa Arg Ala Arg Gly Ala Ser Cys Glu Ser Arg Gly Thr Cys Ser Arg  
 1 5 10 15  
 Arg Arg Pro Arg Ser Thr Gly Trp Cys Val Gly Glu Ala Ala Pro Gly  
 20 25 30  
 Ser Arg Met Lys Arg Gly Gly Arg Asp Ser Asp Arg Asn Ser Ser Glu  
 35 40 45  
 Glu Gly Thr Ala Glu Lys Ser Lys Lys Leu Arg Thr Thr Asn Glu His  
 50 55 60  
 Ser Gln Thr Cys Asp Trp Gly Asn Leu Leu Gln Asp Ile Ile Leu Gln  
 65 70 75 80  
 Val Phe Lys Tyr Leu Pro Leu Leu Asp Arg Ala His Ala Ser Gln Val  
 85 90 95  
 Cys Arg Asn Trp Asn Gln Val Phe His Met Pro Asp Leu Trp Arg Cys  
 100 105 110  
 Phe Glu Phe Glu Leu Asn Gln Pro Ala Thr Ser Tyr Leu Lys Ala Thr  
 115 120 125  
 His Pro Glu Leu Ile Lys Gln Ile Ile Lys Arg His Ser Asn His Leu  
 130 135 140  
 Gln Tyr Val Ser Phe Lys Val Asp Ser Ser Lys Glu Ser Ala Glu Ala  
 145 150 155 160  
 Ala Cys Asp Ile Leu Ser Gln Leu Val Asn Cys Ser Leu Lys Thr Leu  
 165 170 175  
 Gly Leu Ile Ser Thr Ala Arg Pro Ser Phe Met Asp Leu Pro Lys Ser  
 180 185 190  
 His Phe Ile Ser Ala Leu Thr Val Val Phe Val Asn Ser Lys Ser Leu  
 195 200 205  
 Ser Ser Leu Lys Ile Asp Asp Thr Pro Val Asp Asp Pro Ser Leu Lys  
 210 215 220  
 Val Leu Val Ala Asn Asn Ser Asp Thr Leu Lys Leu Leu Lys Met Ser  
 225 230 235 240  
 Ser Cys Pro His Val Ser Pro Ala Gly Ile Leu Cys Val Ala Asp Gln  
 245 250 255  
 Cys His Gly Leu Arg Glu Leu Ala Leu Asn Tyr His Leu Leu Ser Asp  
 260 265 270  
 Glu Leu Leu Leu Ala Leu Ser Ser Glu Lys His Val Arg Leu Glu His  
 275 280 285  
 Leu Arg Ile Asp Val Val Ser Glu Asn Pro Gly Gln Thr His Phe His  
 290 295 300  
 Thr Ile Gln Lys Ser Ser Trp Asp Ala Phe Ile Arg His Ser Pro Lys  
 305 310 315 320  
 Val Asn Leu Val Met Tyr Phe Phe Leu Tyr Glu Glu Glu Phe Asp Pro  
 325 330 335  
 Phe Phe Arg Tyr Glu Ile Pro Ala Thr His Leu Tyr Phe Gly Arg Ser  
 340 345 350  
 Val Ser Lys Asp Val Leu Gly Arg Val Gly Met Thr Cys Pro Arg Leu

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      355              360              365
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Cys Gly Gly Arg Leu Ser Gln Leu Ser Ile Met Glu Glu Val Leu Ile
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&lt;210&gt; 3513

&lt;211&gt; 2103

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3513

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&lt;210&gt; 3514

&lt;211&gt; 484

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3514

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<212> DNA  
<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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&lt;211&gt; 342

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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<210> 3518  
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 <212> PRT  
 <213> Homo sapiens

<400> 3518  
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 Ile Val Ala Ser Phe Val Leu Ala Gly Glu Thr Glu Ala Thr Ala Leu  
 35 40 45  
 Gln Arg Met Pro Asp Arg Pro Thr Ser Arg Pro Leu Leu Val Arg Ala  
 50 55 60  
 Ser Leu Ser Pro Ser Gly Leu Gly Ala Cys Asp Thr Ala Leu Arg Pro  
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 Gly Gln Gly

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 <212> DNA  
 <213> Homo sapiens

<400> 3519  
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&lt;210&gt; 3520

&lt;211&gt; 303

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3520

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Ala Gly Pro Gly Gln Gly Ser Ser Glu Lys Pro Lys Leu Gly Leu
20          25          30
Val Val Asn Leu Pro Pro Ala Gln Leu Ser Ser Ser Asp Glu Glu Thr
35          40          45
Arg Glu Glu Leu Ala Arg Ile Gly Leu Val Pro Pro Pro Glu Glu Phe
50          55          60
Ala Asn Gly Val Leu Leu Ala Thr Pro Leu Ala Gly Pro Gly Pro Ser
65          70          75          80
Pro Thr Thr Val Pro Ser Pro Ala Ser Gly Lys Pro Ser Ser Glu Pro
85          90          95
Pro Pro Ala Pro Glu Ser Ala Ala Asp Ser Gly Val Glu Glu Ala Asp
100          105          110
Thr Arg Ser Ser Ser Asp Pro His Leu Glu Thr Thr Ser Thr Ile Ser
115          120          125
Thr Val Ser Ser Met Ser Thr Leu Ser Ser Glu Ser Gly Glu Leu Thr
130          135          140
Asp Thr His Thr Ser Phe Ala Asp Gly His Thr Phe Leu Leu Glu Lys
145          150          155          160
Pro Pro Val Pro Pro Lys Pro Lys Leu Lys Ser Pro Leu Gly Lys Gly
165          170          175
Pro Val Thr Phe Arg Asp Pro Leu Leu Lys Gln Ser Ser Asp Ser Glu
180          185          190
Leu Met Ala Gln Gln His His Ala Ala Ser Ala Gly Leu Ala Ser Ala
195          200          205
Ala Gly Pro Ala Arg Pro Arg Tyr Leu Phe Gln Arg Arg Ser Lys Leu
210          215          220
Trp Gly Asp Pro Val Glu Ser Arg Gly Leu Pro Gly Pro Glu Asp Asp
225          230          235          240
Lys Pro Thr Val Ile Ser Glu Leu Ser Ser Arg Leu Gln Gln Leu Asn
245          250          255
Lys Asp Thr Arg Ser Leu Gly Glu Glu Pro Val Gly Gly Leu Gly Ser
260          265          270
Leu Leu Asp Pro Ala Lys Lys Ser Pro Ile Ala Ala Ala Arg Ser Pro
275          280          285
Leu Ser Ser Leu Gly Leu Gly Gly Trp Tyr Val Asp Ala Thr Ser
290          295          300

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&lt;210&gt; 3521

&lt;211&gt; 638

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3521

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240

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&lt;210&gt; 3522

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3522

Cys Leu Pro Gly Gly Leu Cys Ala Ala Ile Pro Leu His Leu Pro Leu  
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 Leu Leu His Thr Pro Arg Leu Pro Ala Leu Pro Pro Arg Pro His Gln  
 20 25 30  
 Gln His Ala Asp Gln Gly Pro Pro Gly Pro His Leu Asp Leu His Gln  
 35 40 45  
 Asp Leu Gln Ala Glu Pro Leu Arg Pro Ala Gly Leu Gly Gly Gly Leu  
 50 55 60  
 Leu Arg Cys Gly Leu Pro Ser Glu Gln Arg Ala Ala Gly Glu Ala Arg  
 65 70 75 80  
 Gly Leu His Leu Leu Gln Asp Pro Thr Pro Gly Arg Leu Cys Gln Ala  
 85 90 95  
 Pro Ala Gly Pro Pro Gly Gly Gly His Gly Pro Ala Gly Arg Gly Gln  
 100 105 110  
 Pro Ser Arg His Arg Pro Gly Glu Pro Gln Gly Gly Arg Gly Gly Xaa  
 115 120 125  
 Pro Asp Pro Ser Thr Pro Ser Val Arg Gly Ser Gln Arg Thr Ala Ser  
 130 135 140  
 Pro Gly Arg Ala Ser Pro Gly Gly Cys Pro Glu Ala Thr Gly Trp Cys  
 145 150 155 160  
 Cys Arg His Thr Arg Ser Ala Pro Thr Pro Leu Leu Pro Pro Cys Pro  
 165 170 175  
 Ser Pro Ala Ser Ser  
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&lt;210&gt; 3523

&lt;211&gt; 2614

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3523

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420  
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 2614

&lt;210&gt; 3524

&lt;211&gt; 444

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3524

Met	Ala	Pro	Asp	Pro	Leu	Ala	Ala	Glu	Thr	Ala	Ala	Gln	Gly	Leu	Thr
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Pro	Arg	Tyr	Phe	Thr	Trp	Asp	Glu	Val	Ala	Gln	Arg	Ser	Gly	Cys	Glu
			20				25						30		
Glu	Arg	Trp	Leu	Val	Ile	Asp	Arg	Lys	Val	Tyr	Asn	Ile	Ser	Asp	Phe
			35				40					45			
Ser	Arg	Arg	His	Pro	Gly	Gly	Ser	Arg	Val	Ile	Ser	His	Tyr	Ala	Gly
			50				55				60				
Gln	Asp	Ala	Thr	Asp	Pro	Phe	Val	Ala	Phe	His	Ile	Asn	Lys	Gly	Leu
			65			70				75				80	
Val	Lys	Lys	Tyr	Met	Asn	Ser	Leu	Leu	Ile	Gly	Glu	Leu	Ser	Pro	Glu
				85				90					95		
Gln	Pro	Ser	Phe	Glu	Pro	Thr	Lys	Asn	Lys	Glu	Leu	Thr	Asp	Glu	Phe
			100					105					110		
Arg	Glu	Leu	Arg	Ala	Thr	Val	Glu	Arg	Met	Gly	Leu	Met	Lys	Ala	Asn

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His Val Phe Phe Leu Leu Tyr Leu Leu His Ile Leu Leu Leu Asp Gly
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Ala Ala Trp Leu Thr Leu Trp Val Phe Gly Thr Ser Phe Leu Pro Phe
145      150      155      160
Leu Leu Cys Ala Val Leu Leu Ser Ala Val Gln Ala Gln Ala Gly Trp
      165      170      175
Leu Gln His Asp Phe Gly His Leu Ser Val Phe Ser Thr Ser Lys Trp
      180      185      190
Asn His Leu Leu His His Phe Val Ile Gly His Leu Lys Gly Ala Pro
      195      200      205
Ala Ser Trp Trp Asn His Met His Phe Gln His His Ala Lys Pro Asn
      210      215      220
Cys Phe Arg Lys Asp Pro Asp Ile Asn Met His Pro Phe Phe Phe Ala
225      230      235      240
Leu Gly Lys Ile Leu Ser Val Glu Leu Gly Lys Gln Lys Lys Lys Tyr
      245      250      255
Met Pro Tyr Asn His Gln His Lys Tyr Phe Phe Leu Ile Gly Pro Pro
      260      265      270
Ala Leu Leu Pro Leu Tyr Phe Gln Trp Tyr Ile Phe Tyr Phe Val Ile
      275      280      285
Gln Arg Lys Lys Trp Val Asp Leu Val Trp Met Ile Thr Phe Tyr Val
      290      295      300
Arg Phe Phe Leu Thr Tyr Val Pro Leu Leu Gly Leu Lys Ala Phe Leu
305      310      315      320
Gly Leu Phe Phe Ile Val Arg Phe Leu Glu Ser Asn Trp Phe Val Trp
      325      330      335
Val Thr Gln Met Asn His Ile Pro Met His Ile Asp His Asp Arg Asn
      340      345      350
Met Asp Trp Val Ser Thr Gln Leu Gln Ala Thr Cys Asn Val His Lys
      355      360      365
Ser Ala Phe Asn Asp Trp Phe Ser Gly His Leu Asn Phe Gln Ile Glu
      370      375      380
His His Leu Phe Pro Thr Met Pro Arg His Asn Tyr His Lys Val Ala
385      390      395      400
Pro Leu Val Gln Ser Leu Cys Ala Lys His Gly Ile Glu Tyr Gln Ser
      405      410      415
Lys Pro Leu Leu Ser Ala Phe Ala Asp Ile Ile His Ser Leu Lys Glu
      420      425      430
Ser Gly Gln Leu Trp Leu Asp Ala Tyr Leu His Gln
      435      440

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&lt;210&gt; 3525

&lt;211&gt; 1116

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3525

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attaaagagg ggaaactggg agtttccaat taacaatgaa gcaggagctg actaaggctt

120

tggaacagaa accagatgat gcacaatatt attgtcaaag agcttattgt cacattcttc

180

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 300  
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 360  
 ggaggacaaa aattangtgc agatgcta atcagtgcact ggattaaaag gtgtcaagaa  
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 1116

&lt;210&gt; 3526

&lt;211&gt; 304

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3526

Ile	Thr	Asp	Glu	Lys	Arg	Ile	Phe	Phe	Tyr	Ile	Val	Ala	Val	Ala	Asp
1				5					10					15	
Ala	Lys	Lys	Ser	Arg	Glu	Phe	Asn	Pro	Asn	Asn	Ser	Thr	Ala	Val	Leu
			20				25						30		
Arg	Lys	Gly	Ile	Cys	Glu	Tyr	His	Leu	Lys	Asn	Tyr	Ala	Ala	Ala	Leu
		35				40						45			
Glu	Thr	Phe	Ile	Gly	Gly	Gln	Lys	Leu	Xaa	Ala	Asp	Ala	Asn	Phe	Ser
	50				55					60					
Asp	Trp	Ile	Lys	Arg	Cys	Gln	Glu	Ala	Gln	Asn	Gly	Ser	Glu	Ser	Glu
65				70					75				80		
Val	Val	Met	Glu	Pro	Ala	Leu	Glu	Gly	Thr	Gly	Lys	Glu	Gly	Lys	Lys
				85				90					95		
Ala	Ser	Ser	Arg	Lys	Arg	Thr	Leu	Ala	Glu	Pro	Pro	Ala	Lys	Gly	Leu
			100				105						110		
Leu	Gln	Pro	Val	Lys	Leu	Ser	Arg	Ala	Glu	Leu	Tyr	Lys	Glu	Pro	Thr

115	120	125
Asn Glu Glu Leu Asn Arg	Leu Arg Glu Thr Glu Ile	Leu Phe His Ser
130	135	140
Ser Leu Leu Arg Leu Gln Val	Glu Glu Leu Leu Lys Glu Val	Arg Leu
145	150	155
Ser Glu Lys Lys Lys Asp Arg	Ile Asp Ala Phe Leu Arg	Glu Val Asn
165	170	175
Gln Arg Val Val Arg Val Pro	Ser Val Pro Glu Thr Glu Leu Thr	Asp
180	185	190
Gln Ala Trp Leu Pro Ala Gly	Val Arg Val Pro Leu His Gln Val	Pro
195	200	205
Tyr Ala Val Lys Gly Cys Phe	Arg Phe Leu Pro Pro Ala Gln Val	Thr
210	215	220
Val Val Gly Ser Tyr Leu Leu	Gly Thr Cys Ile Arg Pro Asp Ile	Asn
225	230	235
Val Asp Val Ala Leu Thr Met	Pro Arg Glu Ile Leu Gln Asp Lys	Asp
245	250	255
Gly Leu Asn Gln Arg Tyr Phe	Arg Lys Arg Ala Leu Tyr Leu Ala	His
260	265	270
Leu Ala His His Leu Ala Gln	Asp Pro Leu Phe Gly Ser Val Cys	Phe
275	280	285
Ser Tyr Thr Asn Gly Cys His	Leu Lys Pro Ser Leu Leu Leu Arg	Pro
290	295	300

&lt;210&gt; 3527

&lt;211&gt; 2838

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3527

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<211> 281

<212> PRT

<213> Homo sapiens

<400> 3528

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&lt;211&gt; 3026

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3529

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<212> DNA

<213> Homo sapiens

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&lt;211&gt; 254

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3532

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Lys His Gly Ala Ile Pro Gly Gly Leu Ser Ile Gly Pro Pro Gly Lys  
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Ser Ser Ile Asp Asp Ser Tyr Gly Arg Tyr Asp Leu Ile Gln Asn Ser  
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Glu Ser Pro Ala Ser Pro Pro Val Ala Val Pro His Ser Trp Ser Arg  
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Ala Lys Ser Asp Ser Asp Lys Ile Ser Asn Gly Ser Ser Ile Asn Trp  
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Pro Pro Glu Phe His Pro Gly Val Pro Trp Lys Gly Leu Gln Asn Ile  
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&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

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<210> 3538  
<211> 154  
<212> PRT  
<213> Homo sapiens

<400> 3538  
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 Ser Trp Thr Leu Cys Lys His Phe Cys Ala Cys Trp Val Gly Ala Arg  
 20 25 30  
 Leu Lys Asp Pro Ser Ser Asn Pro Ala Gly Pro Arg Ala Thr Ala Gly  
 35 40 45  
 Gln Gly Val Ala Pro Gly Phe Arg His Ala Thr Thr Thr Arg Ala Arg  
 50 55 60  
 Ala Thr His Ala Ser Cys Ala His Leu Thr His Thr Pro Leu Pro Gly  
 65 70 75 80  
 His Ala Asp Thr Pro Gln Pro His Thr Ser His Ala Val His Leu Arg  
 85 90 95  
 Leu Leu Thr Ser His Ala Gln Cys Trp Cys Thr Phe Ala Ser His Met

100 105 110  
 Leu Pro Ser Pro Pro Thr Gln Gly His Pro Thr Ala Pro Pro Cys Pro  
 115 120 125  
 Cys Pro Ser Pro Ser Leu Glu Val Pro Cys Pro Ala Gly Pro Val Asn  
 130 135 140  
 Met Gln Trp Glu Ser Gln Ala Val Gln Trp  
 145 150

&lt;210&gt; 3539

&lt;211&gt; 818

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3539

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ggcaatgggg gtgcctgtgg tcccagctgc tcgggaggct gaggcggaat tgcttgagcg  
 120

cggggggcgg aggttgcagt gagccgagat cgccgaggta cgctccagtc tgggcgacaa  
 180

gagcgaaact cgatatcaaa aaaaaaaaaa acgtcctgat ccagagcct cttcacgcgt  
 240

cccctaccac agcacttcag agaagcaggt ctttaatcag tgtgtctaga tgcagctgct  
 300

gactgtcacc cctacccgc ctctctccca gtctgaggac ggccagtcac cccattgccc  
 360

cagaatcaga cgaccctcgg ttcttccaga gccaagctgg gcaacttccc ctggcaagcc  
 420

ttcaccagta tccacggccg tggggggcgg gcctgctgg gggacagatg gatcctcact  
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gctgccca cagtctaccc caaggacagt gtttctctca ggaagaacca gagtgtgaat  
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gtgttcttgg gccacacagc catagatgag atgctgaaac tggggaacca ccctgtccac  
 600

cgtgtcgttg tgcacccga ctaccgtcag aatgagtccc ataactttag cggggacatc  
 660

gccctcctgg agctgcagca cagcatcccc ctgggcccc aagtcctccc ggtctgtctg  
 720

cccgataatg agaccctcta ccgcagcggc ttgttgggct acgtcagtgg gtttggcatg  
 780

gagatgggct ggctaactac tgagctgaag tactcgag  
 818

&lt;210&gt; 3540

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3540

Ser Val Cys Leu Asp Ala Ala Asp Cys His Pro Tyr Pro Ala Ser  
 1 5 10 15

Leu Pro Val Cys Gly Arg Pro Val Thr Pro Ile Ala Gln Asn Gln Thr  
 20 25 30

Thr Leu Gly Ser Ser Arg Ala Lys Leu Gly Asn Phe Pro Trp Gln Ala

```

      35      40      45
Phe Thr Ser Ile His Gly Arg Gly Gly Gly Ala Leu Leu Gly Asp Arg
  50      55      60
Trp Ile Leu Thr Ala Ala His Thr Val Tyr Pro Lys Asp Ser Val Ser
  65      70      75      80
Leu Arg Lys Asn Gln Ser Val Asn Val Phe Leu Gly His Thr Ala Ile
      85      90      95
Asp Glu Met Leu Lys Leu Gly Asn His Pro Val His Arg Val Val Val
      100      105      110
His Pro Asp Tyr Arg Gln Asn Glu Ser His Asn Phe Ser Gly Asp Ile
      115      120      125
Ala Leu Leu Glu Leu Gln His Ser Ile Pro Leu Gly Pro Asn Val Leu
      130      135      140
Pro Val Cys Leu Pro Asp Asn Glu Thr Leu Tyr Arg Ser Gly Leu Leu
      145      150      155      160
Gly Tyr Val Ser Gly Phe Gly Met Glu Met Gly Trp Leu Thr Thr Glu
      165      170      175
Leu Lys Tyr Ser
      180

```

&lt;210&gt; 3541

&lt;211&gt; 722

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3541

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  60
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  120
acggctgctg cccttgctact actacctcca aatacgttct tgctggtagt ggccggcagca
  180
ggaccaatta cctctttttt gctctccctc gagaagctcc agatggcgctc ttccgtgggc
  240
aacgtggccg acagcacaga accaacgaaa cgtatgcttt ccttccaagg gttagctgag
  300
ttggcacatc gagaatatca ggcaggagat tttagggcag ctgagagaca ctgcatgcag
  360
ctctggagac aagagccaga caatactggt gtgcttttat tactttcatc tatacacttc
  420
cagtgtcgaa ggctggacag atctgtctac ttttagcactc tggcaattaa acagaacccc
  480
cttctggcag aagcttattc gaatttgggg aatgtgtaca aggaaagagg gcagttgcag
  540
gaggcaattg agcattatcg acatgcattg cgtctcaaac ctgatttcat cgatggttat
  600
attaacgctg cagccgcctt ggtagcagcg ggtgacatgg aaggggcagt acaagcttac
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gtctctgcac tccagcctgg gtgacaaagt gaggccctgt ctcaaaaaaa aaaaaaaaaa
  720
aa
  722

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&lt;210&gt; 3542

<211> 153  
 <212> PRT  
 <213> Homo sapiens

<400> 3542

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Met Ala Ser Ser Val Gly Asn Val Ala Asp Ser Thr Glu Pro Thr Lys
 1           5           10           15
Arg Met Leu Ser Phe Gln Gly Leu Ala Glu Leu Ala His Arg Glu Tyr
      20           25           30
Gln Ala Gly Asp Phe Glu Ala Ala Glu Arg His Cys Met Gln Leu Trp
      35           40           45
Arg Gln Glu Pro Asp Asn Thr Gly Val Leu Leu Leu Leu Ser Ser Ile
      50           55           60
His Phe Gln Cys Arg Arg Leu Asp Arg Ser Ala His Phe Ser Thr Leu
65           70           75           80
Ala Ile Lys Gln Asn Pro Leu Leu Ala Glu Ala Tyr Ser Asn Leu Gly
      85           90           95
Asn Val Tyr Lys Glu Arg Gly Gln Leu Gln Glu Ala Ile Glu His Tyr
      100          105          110
Arg His Ala Leu Arg Leu Lys Pro Asp Phe Ile Asp Gly Tyr Ile Asn
      115          120          125
Ala Ala Ala Ala Leu Val Ala Ala Gly Asp Met Glu Gly Ala Val Gln
      130          135          140
Ala Tyr Val Ser Ala Leu Gln Pro Gly
145          150

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<210> 3543  
 <211> 1206  
 <212> DNA  
 <213> Homo sapiens

<400> 3543

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120
gtttggttgt tgetcaggat gtgtaatagt ttctcttcag ccataagcca cgcttggtag
180
atattaattg agtggagaga tcttgcacct cttccagtta tgcatttgtg gtttgtcgtc
240
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300
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360
gattgcaaaa tgggtctccg gattcacttt gttgttgacc cacatggttg gtgctgcatg
420
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480
cctcactatg aagaaggaca tattccagge atattaataa taatattcta tggcatttcc
540
atattctgtc tggttgcctt agtgagggcc tccataactg atccaggaag actccctgag
600
aaccceaaga tcccacatgg agaaaggagg ttctgggaat tatgtaacaa gtgtaatttg
660

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 720  
 catcaactgtc catggattaa caattgtgtt ggtgaagata atcattggct ctttctgcag  
 780  
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 840  
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 900  
 gccataatga gactagcagc ctttatgggc attactatgt tagttggaat aactggactc  
 960  
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 1080  
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 1206

&lt;210&gt; 3544

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3544

Met Gly Leu Arg Ile His Phe Val Val Asp Pro His Gly Trp Cys Cys  
 1 5 10 15  
 Met Gly Leu Ile Val Phe Val Trp Leu Tyr Asn Ile Val Leu Ile Pro  
 20 25 30  
 Lys Ile Val Leu Phe Pro His Tyr Glu Glu Gly His Ile Pro Gly Ile  
 35 40 45  
 Leu Ile Ile Ile Phe Tyr Gly Ile Ser Ile Phe Cys Leu Val Ala Leu  
 50 55 60  
 Val Arg Ala Ser Ile Thr Asp Pro Gly Arg Leu Pro Glu Asn Pro Lys  
 65 70 75 80  
 Ile Pro His Gly Glu Arg Glu Phe Trp Glu Leu Cys Asn Lys Cys Asn  
 85 90 95  
 Leu Met Arg Pro Lys Arg Ser His His Cys Ser Arg Cys Gly His Cys  
 100 105 110  
 Val Arg Arg Met Asp His His Cys Pro Trp Ile Asn Asn Cys Val Gly  
 115 120 125  
 Glu Asp Asn His Trp Leu Phe Leu Gln Leu Cys Phe Tyr Thr Glu Leu  
 130 135 140  
 Leu Thr Cys Tyr Ala Leu Met Phe Ser Phe Cys His Tyr Tyr Tyr Phe  
 145 150 155 160  
 Leu Pro Leu Lys Lys Arg Asn Leu Asp Leu Phe Val Phe Arg His Glu  
 165 170 175  
 Leu Ala Ile Met Arg Leu Ala Ala Phe Met Gly Ile Thr Met Leu Val  
 180 185 190  
 Gly Ile Thr Gly Leu Phe Tyr Thr Gln Leu Ile Gly Ile Ile Thr Pro  
 195 200 205  
 Cys Ser Leu Ile Leu Leu Lys Cys Gly Ser Val Ser Asn Asn Ser Leu

210	215	220
Gly Asp Leu Met Lys Ile Ser Glu Thr Phe Ala Leu Arg Ile Pro Ser		
225	230	235
Phe Val Val Met Cys Pro Glu Asn Ser Ser Leu Arg Val Phe Asn Ser		240
	245	250
Val Lys Leu Leu Leu Cys Leu Asp Ser Pro Leu Ile Gln Trp Ser Thr		255
	260	265
		270

Lys

&lt;210&gt; 3545

&lt;211&gt; 3657

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3545

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120  
ctggcagacc ctggctgggc atccatcagc aggggtgtgc tgggtgtgtga cgagtgtgtc  
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240  
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300  
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360  
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1140

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 3600  
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 3657

&lt;210&gt; 3546

&lt;211&gt; 792

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3546

Val Asn Val Trp Arg Val Leu Gly Leu Ala Gln Ala Arg Ala Gly Ala  
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 Gln Glu Val Trp Pro Ile Ile Trp Leu Arg Leu Thr Leu Ala Leu Thr  
 20 25 30  
 Leu Ala Asp Pro Gly Trp Ala Ser Ile Ser Arg Gly Val Leu Val Cys  
 35 40 45  
 Asp Glu Cys Cys Ser Val His Arg Ser Leu Gly Arg His Ile Ser Ile  
 50 55 60  
 Val Lys His Leu Arg His Ser Ala Trp Pro Pro Thr Leu Leu Gln Met  
 65 70 75 80  
 Val His Thr Leu Ala Ser Asn Gly Ala Asn Ser Ile Trp Glu His Ser  
 85 90 95  
 Leu Leu Asp Pro Ala Gln Val Gln Ser Gly Arg Arg Lys Ala Asn Pro  
 100 105 110  
 Gln Asp Lys Val His Pro Ile Lys Ser Glu Phe Ile Arg Ala Lys Tyr  
 115 120 125  
 Gln Met Leu Ala Phe Val His Lys Leu Pro Cys Arg Asp Asp Asp Gly

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      130      135      140
Val Thr Ala Lys Asp Leu Ser Lys Gln Leu His Ser Ser Val Arg Thr
145      150      155      160
Gly Asn Leu Glu Thr Cys Leu Arg Leu Leu Ser Leu Gly Ala Gln Ala
      165      170      175
Asn Phe Phe His Pro Glu Lys Gly Thr Thr Pro Leu His Val Ala Ala
      180      185      190
Lys Ala Gly Gln Thr Leu Gln Ala Glu Leu Leu Val Val Tyr Gly Ala
      195      200      205
Asp Pro Gly Ser Pro Asp Val Asn Gly Arg Thr Pro Ile Asp Tyr Ala
      210      215      220
Arg Gln Ala Gly His His Glu Leu Ala Glu Arg Leu Val Glu Cys Gln
225      230      235      240
Tyr Glu Leu Thr Asp Arg Leu Ala Phe Tyr Leu Cys Gly Arg Lys Pro
      245      250      255
Asp His Lys Asn Gly His Tyr Ile Ile Pro Gln Met Ala Asp Arg Ser
      260      265      270
Arg Gln Lys Cys Met Ser Gln Ser Leu Asp Leu Ser Glu Leu Ala Lys
      275      280      285
Ala Ala Lys Lys Lys Leu Gln Ala Leu Ser Asn Arg Leu Phe Glu Glu
      290      295      300
Leu Ala Met Asp Val Tyr Asp Glu Val Asp Arg Arg Glu Asn Asp Ala
305      310      315      320
Val Trp Leu Ala Thr Gln Asn His Ser Thr Leu Val Thr Glu Arg Ser
      325      330      335
Ala Val Pro Phe Leu Pro Val Asn Pro Glu Tyr Ser Ala Thr Arg Asn
      340      345      350
Gln Gly Arg Gln Lys Leu Ala Arg Phe Asn Ala Arg Glu Phe Ala Thr
      355      360      365
Leu Ile Ile Asp Ile Leu Ser Glu Ala Lys Arg Arg Gln Gln Gly Lys
      370      375      380
Ser Leu Ser Ser Pro Thr Asp Asn Leu Glu Leu Ser Leu Arg Ser Gln
385      390      395      400
Ser Asp Leu Asp Asp Gln His Asp Tyr Asp Ser Val Ala Ser Asp Glu
      405      410      415
Asp Thr Asp Gln Glu Pro Leu Arg Ser Thr Gly Ala Thr Arg Ser Asn
      420      425      430
Arg Ala Arg Ser Met Asp Ser Ser Asp Leu Ser Asp Gly Ala Val Thr
      435      440      445
Leu Gln Glu Tyr Leu Glu Leu Lys Lys Ala Leu Ala Thr Ser Glu Ala
      450      455      460
Lys Val Gln Gln Leu Met Lys Val Asn Ser Ser Leu Ser Asp Glu Leu
465      470      475      480
Arg Arg Leu Gln Arg Glu His Phe Ala Pro Ile Ile His Lys Leu Gln
      485      490      495
Ala Glu Asn Leu Gln Leu Arg Gln Pro Pro Gly Pro Val Pro Thr Pro
      500      505      510
Pro Leu Pro Ser Glu Arg Ala Glu His Thr Pro Met Ala Pro Gly Gly
      515      520      525
Ser Thr His Arg Arg Asp Arg Gln Ala Phe Ser Met Tyr Glu Pro Gly
      530      535      540
Ser Ala Leu Lys Pro Phe Gly Gly Pro Pro Gly Asp Glu Leu Thr Thr
545      550      555      560
Arg Leu Gln Pro Phe His Ser Thr Glu Leu Glu Asp Asp Ala Ile Tyr

```

565 570 575  
 Ser Val His Val Pro Ala Gly Leu Tyr Arg Ile Arg Lys Gly Val Ser  
 580 585 590  
 Ala Ser Ala Val Pro Phe Thr Pro Ser Ser Pro Leu Leu Ser Cys Ser  
 595 600 605  
 Gln Glu Gly Ser Arg His Thr Ser Lys Leu Ser Arg His Gly Ser Gly  
 610 615 620  
 Ala Asp Ser Asp Tyr Glu Asn Thr Gln Ser Gly Asp Pro Leu Leu Gly  
 625 630 635 640  
 Leu Glu Gly Lys Arg Phe Leu Glu Leu Gly Lys Glu Glu Asp Phe His  
 645 650 655  
 Pro Glu Leu Glu Ser Leu Asp Gly Asp Leu Asp Pro Gly Leu Pro Ser  
 660 665 670  
 Thr Glu Asp Val Ile Leu Lys Thr Glu Gln Val Thr Lys Asn Ile Gln  
 675 680 685  
 Glu Leu Leu Arg Ala Ala Gln Glu Phe Lys His Asp Ser Phe Val Pro  
 690 695 700  
 Cys Ser Glu Lys Ile His Leu Ala Val Thr Glu Met Ala Ser Leu Phe  
 705 710 715 720  
 Pro Lys Arg Pro Ala Leu Glu Pro Val Arg Ser Ser Leu Arg Leu Leu  
 725 730 735  
 Asn Ala Ser Ala Tyr Arg Leu Gln Ser Glu Cys Arg Lys Thr Val Pro  
 740 745 750  
 Pro Glu Pro Gly Ala Pro Val Asp Phe Gln Leu Leu Thr Gln Gln Val  
 755 760 765  
 Ile Gln Cys Ala Tyr Asp Ile Ala Lys Ala Ala Lys Gln Leu Val Thr  
 770 775 780  
 Ile Thr Thr Arg Glu Lys Lys Gln  
 785 790

&lt;210&gt; 3547

&lt;211&gt; 1039

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3547

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&lt;210&gt; 3548

&lt;211&gt; 346

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3548

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	50				55					60					
Gln	His	Thr	Ser	Ala	Phe	Val	Pro	Ser	Ser	Gly	Arg	Ile	Tyr	Ser	Phe
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			85					90						95	
Lys	Ser	Pro	Phe	Thr	Val	Lys	Gly	Asn	Trp	Tyr	Pro	Tyr	Asn	Gly	Gln
		100					105						110		
Cys	Leu	Pro	Asp	Ile	Asp	Ser	Glu	Glu	Tyr	Phe	Cys	Val	Lys	Arg	Ile
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Phe	Ser	Gly	Gly	Asp	Gln	Ser	Phe	Ser	His	Tyr	Ser	Ser	Pro	Gln	Asn
	130				135					140					
Cys	Gly	Pro	Pro	Asp	Asp	Phe	Arg	Cys	Pro	Asn	Pro	Thr	Lys	Gln	Ile
145				150					155					160	
Trp	Thr	Val	Asn	Glu	Ala	Leu	Ile	Gln	Lys	Trp	Leu	Ser	Tyr	Pro	Ser
			165					170						175	
Gly	Arg	Phe	Pro	Val	Glu	Ile	Ala	Asn	Glu	Ile	Asp	Gly	Thr	Phe	Ser
		180					185					190			
Ser	Ser	Gly	Cys	Leu	Asn	Gly	Ser	Phe	Leu	Ala	Val	Ser	Asn	Asp	Asp
		195				200					205				
His	Tyr	Arg	Thr	Gly	Thr	Arg	Phe	Ser	Gly	Val	Asp	Met	Asn	Ala	Ala
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Arg	Leu	Leu	Phe	His	Lys	Leu	Ile	Gln	Pro	Asp	His	Pro	Gln	Ile	Ser

225		230		235		240
Gln Gln Val Ala	Ala Ser Leu Glu Lys Asn Leu Ile Pro Lys Leu Thr					
	245		250		255	
Ser Ser Leu Pro Asp Val Glu Ala Leu Arg Phe Tyr Leu Thr Leu Pro						
	260		265		270	
Glu Cys Pro Leu Met Ser Asp Ser Asn Asn Phe Ile Thr Ile Ala Ile						
	275		280		285	
Pro Phe Gly Thr Ala Leu Val Asn Leu Glu Lys Ala Pro Leu Lys Val						
	290		295		300	
Leu Glu Asn Trp Trp Ser Val Leu Glu Pro Pro Leu Phe Leu Lys Ile						
305		310		315		320
Val Glu Leu Phe Lys Glu Val Val Val His Leu Leu Lys Leu Tyr Lys						
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Ile Gly Ile Pro Pro Ser Glu Arg Ile Ile						
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&lt;210&gt; 3549

&lt;211&gt; 2542

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3549

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<210> 3550  
 <211> 500  
 <212> PRT  
 <213> Homo sapiens

<400> 3550

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			35				40					45			
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Tyr	Arg	Arg	Lys	Glu	Ile	Leu	Pro	Phe	Glu	Lys	Met	Lys	Glu	Gln	Arg
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Leu	Arg	Glu	His	Leu	Val	Arg	Phe	Glu	Arg	Leu	Arg	Arg	Ala	Met	Glu
			85					90						95	
Leu	Arg	Arg	Arg	Arg	Glu	Ile	Ala	Glu	Arg	Glu	Arg	Arg	Glu	Arg	Glu
			100					105					110		
Arg	Ile	Arg	Ile	Ile	Arg	Glu	Arg	Glu	Glu	Arg	Glu	Arg	Leu	Gln	Arg
			115					120					125		
Glu	Arg	Glu	Arg	Leu	Glu	Ile	Glu	Arg	Gln	Lys	Leu	Glu	Arg	Glu	Arg
			130				135				140				
Met	Glu	Arg	Glu	Arg	Leu	Glu	Arg	Glu	Arg	Ile	Arg	Ile	Glu	Gln	Glu
145					150					155					160
Arg	Arg	Lys	Glu	Ala	Glu	Arg	Ile	Ala	Arg	Glu	Arg	Glu	Glu	Leu	Arg
			165					170						175	
Arg	Gln	Gln	Gln	Gln	Leu	Arg	Tyr	Glu	Gln	Glu	Lys	Arg	Asn	Ser	Leu
			180					185					190		
Lys	Arg	Pro	Arg	Asp	Val	Asp	His	Arg	Arg	Asp	Asp	Pro	Tyr	Trp	Ser
		195				200						205			
Glu	Asn	Lys	Lys	Leu	Ser	Leu	Asp	Thr	Asp	Ala	Arg	Phe	Gly	His	Gly
		210				215					220				
Ser	Asp	Tyr	Ser	Arg	Gln	Gln	Asn	Arg	Phe	Asn	Asp	Phe	Asp	His	Arg
225					230					235					240
Glu	Arg	Gly	Arg	Phe	Pro	Glu	Ser	Ser	Ala	Val	Gln	Ser	Ser	Ser	Phe
			245						250					255	
Glu	Arg	Arg	Asp	Arg	Phe	Val	Gly	Gln	Ser	Glu	Gly	Lys	Lys	Ala	Arg
			260				265						270		
Pro	Thr	Ala	Arg	Arg	Glu	Asp	Pro	Ser	Phe	Glu	Arg	Tyr	Pro	Lys	Asn
		275					280					285			
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		290				295					300				
Arg	Glu	Ser	Asp	Arg	Arg	Glu	Val	Arg	Gly	Glu	Arg	Asp	Glu	Arg	Arg
305					310					315					320
Thr	Val	Ile	Ile	His	Asp	Arg	Pro	Asp	Ile	Thr	His	Pro	Arg	His	Pro
			325						330					335	
Arg	Glu	Ala	Gly	Pro	Asn	Pro	Ser	Arg	Pro	Thr	Ser	Trp	Lys	Ser	Asp
			340					345					350		
Gly	Ser	Met	Ser	Thr	Asp	Lys	Arg	Glu	Thr	Arg	Val	Glu	Arg	Pro	Glu
		355					360					365			
Arg	Ser	Gly	Arg	Glu	Val	Ser	Gly	His	Ser	Val	Arg	Gly	Ala	Pro	Pro

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      370      375      380
Gly Asn Arg Ser Ser Ala Ser Gly Tyr Gly Ser Arg Glu Gly Asp Arg
385      390      395      400
Gly Val Ile Thr Asp Arg Gly Gly Gly Ser Gln His Tyr Pro Glu Glu
      405      410      415
Arg His Val Val Glu Arg His Gly Arg Asp Thr Ser Gly Pro Arg Lys
      420      425      430
Glu Trp His Gly Pro Pro Ser Gln Gly Pro Ser Tyr His Asp Thr Arg
      435      440      445
Arg Met Gly Asp Gly Arg Ala Gly Ala Gly Met Ile Thr Gln His Ser
      450      455      460
Ser Asn Ala Ser Pro Ile Asn Arg Ile Val Gln Ile Ser Gly Asn Ser
465      470      475      480
Met Pro Arg Gly Ser Gly Ser Gly Phe Lys Pro Phe Lys Gly Gly Pro
      485      490      495
Pro Arg Arg Phe
      500

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<210> 3551  
 <211> 545  
 <212> DNA  
 <213> Homo sapiens

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120
tttcttgtga ctggctataa attccatgca gtgctggaat gtgcttctca cagttagagt
180
gctgagcacc tgttttatatt cacactccct tgattcctgg ggtaaattccc atctccgcag
240
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300
taacccccact gtttatcgac aggttctcag gaatcagata gctcgcagtc ggccaagaag
360
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545

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<210> 3552  
 <211> 55  
 <212> PRT  
 <213> Homo sapiens

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<400> 3552
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Ala Lys Lys Asp Met Leu Ala Ala Leu Lys Ser Arg Gln Glu Ala Leu

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Glu	Glu	Thr	Leu	Arg	Gln
			Arg	Leu	Glu
				Leu	Lys
					Lys
					Leu
					Cys
					Leu
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Arg	Glu	Ala	Val	Ser	Leu
					Ser
	50		55		

<210> 3553  
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 <212> DNA  
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 180  
 cccagactc cggatgagag tcttggtcct tctgatctgg agctgaggga gttgaaggag  
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 1260

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<210> 3554

<211> 419

<212> PRT

<213> Homo sapiens

<400> 3554

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		20						25					30		
Ser	Cys	Lys	Lys	Cys	Leu	Val	Ile	Asp	Asp	Gln	Leu	Asn	Ile	Leu	Pro
		35					40					45			
Ile	Ser	Ser	His	Val	Ala	Thr	Met	Glu	Ala	Leu	Pro	Pro	Gln	Thr	Pro
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Ser	Leu	Gln	Asp	Thr	Gln	Pro	Val	Gly	Val	Leu	Val	Asp	Cys	Cys	Lys
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Thr	Leu	Asp	Gln	Ala	Lys	Ala	Val	Leu	Lys	Phe	Ile	Glu	Gly	Ile	Ser
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Glu	Lys	Thr	Leu	Arg	Ser	Thr	Val	Ala	Leu	Thr	Ala	Ala	Arg	Gly	Arg
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Gly	Lys	Ser	Ala	Ala	Leu	Gly	Leu	Ala	Ile	Ala	Gly	Ala	Val	Ala	Phe
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Gly	Tyr	Ser	Asn	Ile	Phe	Val	Thr	Ser	Pro	Ser	Pro	Asp	Asn	Leu	His
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Thr	Leu	Phe	Glu	Phe	Val	Phe	Lys	Gly	Phe	Asp	Ala	Leu	Gln	Tyr	Gln
			165					170					175		
Glu	His	Leu	Asp	Tyr	Glu	Ile	Ile	Gln	Ser	Leu	Asn	Pro	Glu	Phe	Asn
		180						185					190		
Lys	Ala	Val	Ile	Ile	Val	Asn	Val	Phe	Arg	Glu	His	Arg	Gln	Thr	Ile
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		275				280						285			
Thr	Thr	Thr	Ala	Arg	Leu	Ala	Ser	Ala	Arg	Thr	Leu	His	Glu	Val	Ser
	290					295					300				
Leu	Gln	Glu	Ser	Ile	Arg	Tyr	Ala	Pro	Gly	Asp	Ala	Val	Glu	Lys	Trp
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Ile Gln Val

&lt;210&gt; 3555

&lt;211&gt; 1038

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3555

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<210> 3557  
<211> 486

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3557

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&lt;210&gt; 3558

&lt;211&gt; 162

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3558

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 Ser Gln His Gln Phe Tyr Leu Asp Arg Lys Gln Ser Lys Ser Lys Ile  
 35 40 45  
 His Ala Ala Arg Ser Leu Ser Glu Ile Ala Ile Asp Leu Thr Glu Thr  
 50 55 60  
 Gly Thr Leu Lys Thr Ser Lys Leu Ala Asn Met Gly Ser Lys Gly Lys  
 65 70 75 80  
 Ile Ile Ser Gly Ser Ser Gly Ser Leu Leu Ser Ser Gly Ser Gly Ala  
 85 90 95  
 Arg Arg His Cys Ile Leu Leu Pro Gly Ser Gln Glu Ser Asp Ser Ser  
 100 105 110  
 Gln Ser Ala Lys Lys Asp Met Leu Ala Ala Leu Lys Ser Arg Gln Glu  
 115 120 125  
 Ala Leu Glu Glu Thr Leu Arg Gln Arg Leu Glu Glu Leu Lys Lys Leu  
 130 135 140  
 Cys Leu Arg Glu Ala Glu Leu Thr Gly Lys Leu Pro Val Glu Tyr Pro  
 145 150 155 160  
 Leu Asp

&lt;210&gt; 3559

&lt;211&gt; 673

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3559

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&lt;210&gt; 3560

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3560

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Phe Lys Phe Glu Ser Thr Asp Glu Asp Lys Arg Lys Lys Leu Cys Glu
35          40          45
Gly Ile Phe Lys Val Leu Ile Lys Asp Ile Pro Thr Thr Cys Gln Val
50          55          60
Ser Cys Leu Glu Val Leu Arg Ile Leu Ser Arg Asp Lys Lys Val Leu
65          70          75          80
Val Pro Val Thr Thr Lys Glu Asn Met Gln Ile Leu Leu Arg Leu Ala
85          90          95
Lys Leu Asn Glu Leu Asp Asp Ser Leu Glu Lys Val Ser Glu Phe Pro
100         105         110
Val Ile Val Glu Ser Leu Lys Cys Leu Cys Asn Ile Val Phe Asn Ser
115         120         125
Gln Met Ala Gln Gln Leu Ser Leu Glu Leu Asn Leu Ala Ala Lys Leu
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Cys Asn Leu Leu Arg Lys Cys Lys Asp Arg Lys Phe Ile Asn Asp Ile

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2721

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 <213> Homo sapiens

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 35 40 45  
 Cys Val Arg Ile Leu Leu Asp Pro Tyr Ser Arg Met Pro Ala Ser Ser  
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 <212> DNA  
 <213> Homo sapiens

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<210> 3566  
 <211> 193  
 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Gln Lys Pro Pro Phe Pro Gly Ala Arg Ala Val Pro Arg Tyr Ala Arg  
 50 55 60  
 Arg Glu Pro Gly Arg Ala Ala Lys Met Ser Gln Pro Lys Lys Arg Lys  
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 Leu Glu Ser Gly Gly Gly Ala Glu Gly Gly Glu Gly Thr Glu Glu Glu  
 85 90 95  
 Asp Gly Ala Glu Arg Glu Ala Ala Leu Glu Arg Pro Arg Thr Thr Lys  
 100 105 110  
 Arg Glu Arg Asp Gln Leu Tyr Tyr Glu Cys Tyr Ser Asp Val Ser Val  
 115 120 125  
 His Glu Glu Met Ile Ala Asp Arg Val Arg Thr Asp Ala Tyr Arg Trp  
 130 135 140  
 Val Ser Leu Arg Asn Trp Ala Ala Leu Arg Gly Lys Thr Val Leu Asp  
 145 150 155 160  
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 165 170 175  
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&lt;210&gt; 3568

&lt;211&gt; 869

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3568

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			20					25					30		
Phe	Gln	Lys	Gln	Leu	Arg	Gly	Gln	Ile	Ala	Arg	Arg	Val	Tyr	Arg	Gln
		35				40					45				
Leu	Leu	Ala	Glu	Lys	Arg	Glu	Gln	Glu	Glu	Lys	Lys	Lys	Gln	Glu	Glu
		50				55					60				
Glu	Glu	Lys	Lys	Lys	Arg	Glu	Glu	Glu	Glu	Arg	Glu	Arg	Glu	Arg	Glu
65					70					75				80	
Arg	Arg	Glu	Ala	Glu	Leu	Arg	Ala	Gln	Gln	Glu	Glu	Glu	Thr	Arg	Lys

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 Thr Arg Glu Leu Glu Lys Gln Lys Glu Asn Lys Gln Val Glu Glu Ile  
 115 120 125  
 Leu Arg Leu Glu Lys Glu Ile Glu Asp Leu Gln Arg Met Lys Glu Gln  
 130 135 140  
 Gln Glu Leu Ser Leu Thr Glu Ala Ser Leu Gln Lys Leu Gln Glu Arg  
 145 150 155 160  
 Arg Asp Gln Glu Leu Arg Arg Leu Glu Glu Glu Ala Cys Arg Ala Ala  
 165 170 175  
 Gln Glu Phe Leu Glu Ser Leu Asn Phe Asp Glu Ile Asp Glu Cys Val  
 180 185 190  
 Arg Asn Ile Glu Arg Ser Leu Ser Gly Gly Ser Glu Phe Ser Ser Glu  
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 Pro Tyr Pro Glu Glu Glu Val Asp Glu Gly Phe Glu Ala Asp Asp Asp  
 225 230 235 240  
 Ala Phe Lys Asp Ser Pro Asn Pro Ser Glu His Gly His Ser Asp Gln  
 245 250 255  
 Arg Thr Ser Gly Ile Arg Thr Ser Asp Asp Ser Ser Glu Glu Asp Pro  
 260 265 270  
 Tyr Met Asn Asp Thr Val Val Pro Thr Ser Pro Ser Ala Asp Ser Thr  
 275 280 285  
 Val Leu Leu Ala Pro Ser Val Gln Asp Ser Gly Ser Leu His Asn Ser  
 290 295 300  
 Ser Ser Gly Glu Ser Thr Tyr Cys Met Pro Gln Asn Ala Gly Asp Leu  
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 Pro Ser Pro Asp Gly Asp Tyr Asp Tyr Asp Gln Asp Asp Tyr Glu Asp  
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 Gly Ala Ile Thr Ser Gly Ser Ser Val Thr Phe Ser Asn Ser Tyr Gly  
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 355 360 365  
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 370 375 380  
 Asp Ser Glu Glu Asp Phe Asp Ser Arg Phe Asp Thr Asp Asp Glu Leu  
 385 390 395 400  
 Ser Tyr Arg Arg Asp Ser Val Tyr Ser Cys Val Thr Leu Pro Tyr Phe  
 405 410 415  
 His Ser Phe Leu Tyr Met Lys Gly Gly Leu Met Asn Ser Trp Lys Arg  
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 Arg Trp Cys Val Leu Lys Asp Glu Thr Phe Leu Trp Phe Arg Ser Lys  
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 Gln Glu Ala Leu Lys Gln Gly Trp Leu His Lys Lys Gly Gly Gly Ser  
 450 455 460  
 Ser Thr Leu Ser Arg Arg Asn Trp Lys Lys Arg Trp Phe Val Leu Arg  
 465 470 475 480  
 Gln Ser Lys Leu Met Tyr Phe Glu Asn Asp Ser Glu Glu Lys Leu Lys  
 485 490 495  
 Gly Thr Val Glu Val Arg Thr Ala Lys Glu Ile Ile Asp Asn Thr Thr  
 500 505 510  
 Lys Glu Asn Gly Ile Asp Ile Ile Met Ala Asp Arg Thr Phe His Leu

515 520 525  
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 545 550 555 560  
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 Asp Ser Val Cys Ala Ser Asp Ser Pro Asp Arg Pro Asn Ser Phe Val  
 580 585 590  
 Ile Ile Thr Ala Asn Arg Val Leu His Cys Asn Ala Asp Thr Pro Glu  
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 Glu Met His His Trp Ile Thr Leu Leu Gln Arg Ser Lys Gly Asp Thr  
 610 615 620  
 Arg Val Glu Gly Gln Glu Phe Ile Val Arg Gly Trp Leu His Lys Glu  
 625 630 635 640  
 Val Lys Asn Ser Pro Lys Met Ser Ser Leu Lys Leu Lys Lys Arg Trp  
 645 650 655  
 Phe Val Leu Thr His Asn Ser Leu Asp Tyr Tyr Lys Ser Ser Glu Lys  
 660 665 670  
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 675 680 685  
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 690 695 700  
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 725 730 735  
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 755 760 765  
 Pro Ile Leu Arg Tyr Thr His His Pro Leu His Ser Pro Leu Leu Pro  
 770 775 780  
 Leu Pro Tyr Gly Asp Ile Asn Leu Asn Leu Leu Lys Asp Lys Gly Tyr  
 785 790 795 800  
 Thr Thr Leu Gln Asp Glu Ala Ile Lys Ile Phe Asn Ser Leu Gln Gln  
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 Leu Glu Ser Met Ser Asp Pro Ile Pro Ile Ile Gln Gly Ile Leu Gln  
 820 825 830  
 Thr Gly His Asp Leu Arg Pro Leu Arg Asp Glu Leu Tyr Cys Gln Leu  
 835 840 845  
 Ile Lys Gln Thr Asn Lys Val Pro His Pro Gly Ser Val Gly Asn Leu  
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 Tyr Ser Trp Gln Ile  
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&lt;210&gt; 3569

&lt;211&gt; 5070

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3569

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<212> PRT

<213> Homo sapiens

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Gln Ser Leu His Thr His Gln Asp Thr Gln Gly Thr Ser His Arg Trp					
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Pro Ile Thr Ile Leu Ser Phe Arg Glu Phe Thr Tyr His Phe Arg Val					
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Ala Leu Leu Gly Gln Ala Asn Cys Ser Ser Glu Ala Leu Ala Gln Pro					
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<212> PRT

<213> Homo sapiens

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Ile	Asn	Pro	Ser	His	Thr	His	Ser	Pro	Ile	Phe	Ser	Ile	His	Ser	Gly
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Thr	Cys	Val	Phe	Asn	Lys	Pro	Gly	Gly	His	Thr	Ala	Ser	His	Thr	His
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Thr	Leu	Thr	Ala	Thr	Asn	Pro	Arg	Ser	His	Ala	His	Ala	Asp	Ala	Pro
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Cys	Gly	Thr	Cys	Thr	His	Asn	His	Thr	Cys	Val	Gln	Ser	Gly	Arg	His
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Thr	His	Thr	Cys	Ile	Glu	Ala	Ser	Leu	Trp	Thr	Pro	Ser	Ala	Ser	His
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Pro	Ala	Ser	Val	Gln	Glu	Asp	Pro	Pro	Ile	Leu	Arg	Gln	Phe	Pro	Pro
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Glu	Arg	Arg	Val	Leu	Thr	Ala	Ser	Lys	Leu	Ser	Thr	Leu	Arg	Arg	
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 <212> PRT  
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<211> 195

<212> PRT

<213> Homo sapiens

<400> 3578

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Ile	Ser	Glu	His	Phe	His	Pro	Thr	Val	Ile	Gly	Glu	Ser	Met	Tyr	Gly
		35					40					45			
Asp	Phe	Glu	Glu	Ala	Phe	Asp	His	Leu	Gln	Asn	Arg	Leu	Ile	Ala	Thr
	50					55					60				
Lys	Asn	Pro	Glu	Glu	Ile	Arg	Gly	Gly	Gly	Leu	Leu	Lys	Tyr	Ser	Asn
65					70					75				80	
Leu	Leu	Val	Arg	Asp	Phe	Arg	Pro	Thr	Asp	Gln	Glu	Glu	Ile	Lys	Thr
			85					90						95	
Leu	Glu	Arg	Tyr	Met	Cys	Ser	Arg	Phe	Phe	Ile	Asp	Phe	Pro	Asp	Ile
			100					105					110		
Leu	Glu	Gln	Gln	Arg	Lys	Leu	Glu	Thr	Tyr	Leu	Gln	Asn	His	Phe	Ala
		115					120					125			
Glu	Glu	Glu	Arg	Ser	Lys	Tyr	Asp	Tyr	Leu	Met	Ile	Leu	Arg	Arg	Val
	130					135					140				
Val	Asn	Glu	Ser	Thr	Val	Cys	Leu	Met	Gly	His	Glu	Arg	Arg	Gln	Thr
145					150					155				160	
Leu	Asn	Leu	Ile	Ser	Leu	Leu	Ala	Leu	Arg	Val	Leu	Gly	Gly	Thr	Lys
			165					170						175	
His	His	Pro	Pro	Val	Pro	Pro	Arg	Ser	Pro	Val	Thr	Thr	Ser	Gly	Pro
			180					185					190		
Leu	Ser	Gln													
		195													

<210> 3579

<211> 755

<212> DNA

<213> Homo sapiens

<400> 3579

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 120  
 cagatactcc agccacccgc aaggttccag gaaaggacaa tgtcctgcga gaaaatcagg  
 180

aggcctccac ttcttggggc acttgagaag ttcttgggca tgtcactaca tgttggttga  
 240  
 ctcagccatt tctcatgctg ttttgtttct tgcggtggcc acttaacccc aaagaatgaa  
 300  
 gggaggatcc acagtgaag tgcctgagtt tctctatgag accagatgct gtcgaaacca  
 360  
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 420  
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 480  
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 540  
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 aatggtaaat atatgcttta agctctacct ttaaacttgt atgttattca ggcattctct  
 660  
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 720  
 ccaaatttac ttctcttcag ttttaattgtc catgg  
 755

&lt;210&gt; 3580

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3580

Met	Phe	Gly	Phe	Asp	Ser	Ile	Trp	Ser	His	Arg	Glu	Thr	Gln	Ala	Leu
1				5				10						15	
Ser	Leu	Trp	Ile	Leu	Pro	Ser	Phe	Phe	Gly	Val	Lys	Trp	Pro	Pro	Gln
			20					25					30		
Glu	Thr	Lys	Gln	His	Glu	Lys	Trp	Leu	Ser	Gln	Pro	Thr	Cys	Ser	Asp
		35					40					45			
Met	Pro	Arg	Asn	Phe	Ser	Ser	Gly	Pro	Gly	Ser	Gly	Gly	Leu	Leu	Ile
	50					55				60					
Phe	Ser	Gln	Asp	Ile	Val	Leu	Ser	Trp	Asn	Leu	Ala	Gly	Gly	Trp	Ser
65				70				75						80	
Ile	Cys	Ile	Trp	Ser	Ile	Ala	Arg	Leu	Ser	His	Leu	Ser	Ser	Asp	Gln
			85					90					95		
Lys	Cys	Ile	Ser	Lys	Ile	Ile	Thr	Ser	Thr	Lys	Thr	Ile	Ile	Asp	Cys
			100				105						110		
Glu	Gln	Thr	Phe	Ser	Val	Thr	Ser	Arg							
		115					120								

&lt;210&gt; 3581

&lt;211&gt; 2132

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3581

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 tgcacgaccg ccagcgcgctg ctccactggg acctgcgcgg ccccgggggt ggccccgcgc  
 120

ggcgctgct ggacttgtag tcggcgggag agcagcgct gtacgaggcg cgggaccgag  
180  
gccgcctgga gctctcgcc tcggccttcg acgacggcaa cttctcgctg ctcatccgag  
240  
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300  
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360  
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420  
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540  
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gcgcggatgc ctttgagcgc ggtgacttct cactgcgtat cgagccgctg gaggtcgccg  
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720  
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780  
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gccgcggagg ctacgaatac tcggaccaga agtcgggaaa gtcaaagggg aaggatgtta  
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1320  
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1740

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 2132

&lt;210&gt; 3582

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3582

Xaa	Ala	Pro	Gly	Arg	Cys	Cys	Ala	Ala	Arg	Ala	Arg	Ala	Trp	Cys	Gly
1				5					10					15	
Pro	Arg	Thr	Gly	Cys	Thr	Thr	Ala	Ser	Ala	Cys	Ser	Thr	Gly	Thr	Cys
			20					25					30		
Ala	Ala	Pro	Gly	Val	Ala	Pro	Arg	Gly	Ala	Cys	Trp	Thr	Cys	Thr	Arg
		35					40					45			
Arg	Ala	Ser	Ser	Ala	Cys	Thr	Arg	Arg	Gly	Thr	Ala	Ala	Ala	Trp	Ser
	50					55					60				
Ser	Arg	Pro	Arg	Pro	Ser	Thr	Thr	Ala	Thr	Ser	Arg	Cys	Ser	Ser	Ala
65					70					75				80	
Arg	Trp	Arg	Arg	Arg	Thr	Arg	Gly	Cys	Thr	Pro	Ala	Thr	Cys	Thr	Ile
				85				90						95	
Thr	Thr	Ala	Thr	Ser	Thr	Arg	Ala	Trp	Pro	Ser	Ala	Trp	Arg	Ser	Pro
			100					105					110		
Thr	Ala	Pro	Arg	Pro	Pro	Pro	Pro	Thr	Gly	Thr	Ala	Arg	Arg	Arg	Cys
		115					120					125			
Trp	Arg	Trp	Arg	Ala	Ala	His	Pro	Arg	Phe						
		130				135									

&lt;210&gt; 3583

&lt;211&gt; 1554

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3583

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 240

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 1554

&lt;210&gt; 3584

&lt;211&gt; 356

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3584

Met Ser Arg Pro Leu Leu Ile Thr Phe Thr Pro Ala Thr Asp Pro Ser  
 1 5 10 15  
 Asp Leu Trp Lys Asp Gly Gln Gln Gln Pro Gln Pro Glu Lys Pro Glu

20 25 30  
 Ser Thr Leu Asp Gly Ala Ala Ala Arg Ala Phe Tyr Glu Ala Leu Ile  
 35 40 45  
 Gly Asp Glu Ser Ser Ala Pro Asp Ser Gln Arg Ser Gln Thr Glu Pro  
 50 55 60  
 Ala Arg Glu Arg Lys Arg Lys Lys Arg Arg Ile Met Lys Ala Pro Ala  
 65 70 75 80  
 Ala Glu Ala Val Ala Glu Gly Ala Ser Gly Arg His Gly Gln Gly Arg  
 85 90 95  
 Ser Leu Glu Ala Glu Asp Lys Met Thr His Arg Ile Leu Arg Ala Ala  
 100 105 110  
 Gln Glu Gly Asp Leu Pro Glu Leu Arg Arg Leu Leu Glu Pro His Glu  
 115 120 125  
 Ala Gly Gly Ala Gly Gly Asn Ile Asn Ala Arg Asp Ala Phe Trp Trp  
 130 135 140  
 Thr Pro Leu Met Cys Ala Ala Arg Ala Gly Gln Gly Ala Ala Val Ser  
 145 150 155 160  
 Tyr Leu Leu Gly Arg Gly Ala Ala Trp Val Gly Val Cys Glu Leu Ser  
 165 170 175  
 Gly Arg Asp Ala Ala Gln Leu Ala Glu Glu Ala Gly Phe Pro Glu Val  
 180 185 190  
 Ala Arg Met Val Arg Glu Ser His Gly Glu Thr Arg Ser Pro Glu Asn  
 195 200 205  
 Arg Ser Pro Thr Pro Ser Leu Gln Tyr Cys Glu Asn Cys Asp Thr His  
 210 215 220  
 Phe Gln Asp Ser Asn His Arg Thr Ser Thr Ala His Leu Leu Ser Leu  
 225 230 235 240  
 Ser Gln Gly Pro Gln Pro Pro Asn Leu Pro Leu Gly Val Pro Ile Ser  
 245 250 255  
 Ser Pro Gly Phe Lys Leu Leu Leu Arg Gly Gly Trp Glu Pro Gly Met  
 260 265 270  
 Gly Leu Gly Pro Arg Gly Glu Gly Arg Ala Asn Pro Ile Pro Thr Val  
 275 280 285  
 Leu Lys Arg Asp Gln Glu Gly Leu Gly Tyr Arg Ser Ala Pro Gln Pro  
 290 295 300  
 Arg Val Thr His Phe Pro Ala Trp Asp Thr Arg Ala Val Ala Gly Arg  
 305 310 315 320  
 Glu Arg Pro Pro Arg Val Ala Thr Leu Ser Trp Arg Glu Glu Arg Arg  
 325 330 335  
 Arg Glu Glu Lys Asp Arg Ala Trp Glu Arg Asp Leu Arg Thr Tyr Met  
 340 345 350  
 Asn Leu Glu Phe  
 355

&lt;210&gt; 3585

&lt;211&gt; 2782

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3585

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120

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300  
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360  
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420  
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1380  
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1740

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 2760  
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 2782

&lt;210&gt; 3586

&lt;211&gt; 663

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3586

Met	Tyr	Pro	Pro	Pro	Pro	Pro	Pro	Pro	His	Arg	Asp	Phe	Ile	Ser	Val
1				5					10					15	
Thr	Leu	Ser	Phe	Gly	Glu	Ser	Tyr	Asp	Asn	Ser	Lys	Ser	Trp	Arg	Arg
			20					25						30	
Arg	Ser	Cys	Trp	Arg	Lys	Trp	Lys	Gln	Leu	Ser	Arg	Leu	Gln	Arg	Asn
		35					40					45			
Met	Ile	Leu	Phe	Leu	Leu	Ala	Phe	Leu	Leu	Phe	Cys	Gly	Leu	Leu	Phe
		50				55					60				
Tyr	Ile	Asn	Leu	Ala	Asp	His	Trp	Lys	Ala	Leu	Ala	Phe	Arg	Leu	Glu
65					70					75				80	
Glu	Glu	Gln	Lys	Met	Arg	Pro	Glu	Ile	Ala	Gly	Leu	Lys	Pro	Ala	Asn

2746

515                      520                      525  
 Thr Gly Leu Ser Pro Glu Ile Val His Phe Asn Leu Tyr Pro Gln Pro  
 530                      535                      540  
 Gly Arg Arg Asp Val Glu Val Lys Pro Ala Asp Arg His Asn Leu Leu  
 545                      550                      555                      560  
 Arg Pro Glu Thr Val Glu Ser Leu Phe Tyr Leu Tyr Arg Val Thr Gly  
 565                      570                      575  
 Asp Arg Lys Tyr Gln Asp Trp Gly Trp Glu Ile Leu Gln Ser Phe Ser  
 580                      585                      590  
 Arg Phe Thr Arg Val Pro Ser Gly Gly Tyr Ser Ser Ile Asn Asn Val  
 595                      600                      605  
 Gln Asp Pro Gln Lys Pro Glu Pro Arg Asp Lys Met Glu Ser Phe Phe  
 610                      615                      620  
 Leu Gly Glu Thr Leu Lys Tyr Leu Phe Leu Leu Phe Ser Asp Asp Pro  
 625                      630                      635                      640  
 Asn Leu Leu Ser Leu Asp Ala Tyr Val Phe Asn Thr Glu Ala His Pro  
 645                      650                      655  
 Leu Pro Ile Trp Thr Pro Ala  
 660

&lt;210&gt; 3587

&lt;211&gt; 3148

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3587

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 gggctggcca gggtcgggta gggcagcagt ttgtctggac cccgagaaac ccaactggaa  
 120  
 tccagggcct catctgcttc aaagccaaag tcttcctcaa ccttaatctg caccggggcc  
 180  
 agctctggag tcagcgcatt tctgtctcgg cgtccatccc gtggcactcg ccgcctcttc  
 240  
 cgccactgg gcccctcacc gggggctggg ctgccgggtt ctgggggtgc aggagtcctt  
 300  
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 360  
 gcatccgtgc cctggctgcc ctcacctccc agcacaatgg tgaactggct ggcccggtag  
 420  
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&lt;210&gt; 3588

&lt;211&gt; 499

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3588

Met	Ser	Leu	Ala	Asp	Glu	Leu	Leu	Ala	Asp	Leu	Glu	Glu	Ala	Ala	Glu
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Glu	Glu	Glu	Gly	Gly	Ser	Tyr	Gly	Glu	Glu	Glu	Glu	Glu	Pro	Ala	Ile
			20					25					30		
Glu	Asp	Val	Gln	Glu	Glu	Thr	Gln	Leu	Asp	Leu	Ser	Gly	Asp	Ser	Val
		35					40					45			
Lys	Thr	Ile	Ala	Lys	Leu	Trp	Asp	Ser	Lys	Met	Phe	Ala	Glu	Ile	Met
	50					55					60				
Met	Lys	Ile	Glu	Glu	Tyr	Ile	Ser	Lys	Gln	Ala	Lys	Ala	Ser	Glu	Val
65					70					75				80	
Met	Gly	Pro	Val	Glu	Ala	Ala	Pro	Glu	Tyr	Arg	Val	Ile	Val	Asp	Ala
			85					90					95		
Asn	Asn	Leu	Thr	Val	Glu	Ile	Glu	Asn	Glu	Leu	Asn	Ile	Ile	His	Lys
			100					105					110		
Phe	Ile	Arg	Asp	Lys	Tyr	Ser	Lys	Arg	Phe	Pro	Glu	Leu	Glu	Ser	Leu
		115					120					125			
Val	Pro	Asn	Ala	Leu	Asp	Tyr	Ile	Arg	Thr	Val	Lys	Glu	Leu	Gly	Asn
		130					135					140			
Ser	Leu	Asp	Lys	Cys	Lys	Asn	Asn	Glu	Asn	Leu	Gln	Gln	Ile	Leu	Thr
145				150						155				160	
Asn	Ala	Thr	Ile	Met	Val	Val	Ser	Val	Thr	Ala	Ser	Thr	Thr	Gln	Gly
			165						170					175	
Gln	Gln	Leu	Ser	Glu	Glu	Glu	Leu	Glu	Arg	Leu	Glu	Glu	Ala	Cys	Asp

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Met Ala Leu Glu Leu Asn Ala Ser Lys His Arg Ile Tyr Glu Tyr Val
      195      200      205
Glu Ser Arg Met Ser Phe Ile Ala Pro Asn Leu Ser Ile Ile Ile Gly
      210      215      220
Ala Ser Thr Ala Ala Lys Ile Met Gly Val Ala Gly Gly Leu Thr Asn
225      230      235      240
Leu Ser Lys Met Pro Ala Cys Asn Ile Met Leu Leu Gly Ala Gln Arg
      245      250      255
Lys Thr Leu Ser Gly Phe Ser Ser Thr Ser Val Leu Pro His Thr Gly
      260      265      270
Tyr Ile Tyr His Ser Asp Ile Val Gln Ser Leu Pro Pro Asp Leu Arg
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Arg Lys Ala Ala Arg Leu Val Ala Ala Lys Cys Thr Leu Ala Ala Arg
      290      295      300
Val Asp Ser Phe His Glu Ser Thr Glu Gly Lys Val Gly Tyr Glu Leu
305      310      315      320
Lys Asp Glu Ile Glu Arg Lys Phe Asp Lys Trp Gln Glu Pro Pro Pro
      325      330      335
Val Lys Gln Val Lys Pro Leu Pro Ala Pro Leu Asp Gly Gln Arg Lys
      340      345      350
Lys Arg Gly Gly Arg Arg Tyr Arg Lys Met Lys Glu Arg Leu Gly Leu
      355      360      365
Thr Glu Ile Arg Lys Gln Ala Asn Arg Met Ser Phe Gly Glu Ile Glu
      370      375      380
Glu Asp Ala Tyr Gln Glu Asp Leu Gly Phe Ser Leu Gly His Leu Gly
385      390      395      400
Lys Ser Gly Ser Gly Arg Val Arg Gln Thr Gln Val Asn Glu Ala Thr
      405      410      415
Lys Ala Arg Ile Ser Lys Thr Leu Gln Arg Thr Leu Gln Lys Gln Ser
      420      425      430
Val Val Tyr Gly Gly Lys Ser Thr Ile Arg Asp Arg Ser Ser Gly Thr
      435      440      445
Ala Ser Ser Val Ala Phe Thr Pro Leu Gln Gly Leu Glu Ile Val Asn
      450      455      460
Pro Gln Ala Ala Glu Lys Lys Val Ala Glu Ala Asn Gln Lys Tyr Phe
465      470      475      480
Ser Ser Met Ala Glu Phe Leu Lys Val Lys Gly Glu Lys Ser Gly Leu
      485      490      495
Met Ser Thr

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&lt;210&gt; 3589

&lt;211&gt; 675

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3589

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120

aatagttctt gaccaggtc cctccatgaa cctcgaagct gaccagcca taggggggat

180

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 675

&lt;210&gt; 3590

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3590

Met	Leu	Pro	Thr	Arg	Pro	Pro	Asn	Thr	Leu	Ala	Ser	Gly	Val	Ser	Thr
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Asn	Leu	Ile	Leu	Pro	Ser	Pro	Asp	Ser	Ser	Pro	Gln	Ala	Lys	Pro	Leu
			20					25					30		
Asp	Pro	Met	Ser	Pro	Phe	His	Leu	Ser	Ser	Val	Ile	Leu	Cys	Arg	Pro
			35				40					45			
Ser	Ala	Trp	Pro	Cys	Leu	Arg	Ser	Ser	Ser	Pro	Pro	Ala	Ala	Gln	Gly
			50			55					60				
Ser	Phe	Val	Ser	Ala	Gln	Glu	Gly	Pro	Tyr	Asn	Pro	Ser	Trp	Leu	Trp
65					70					75				80	
Pro	Gly	Pro	Cys	Phe	Val	Ser	Glu	Leu	Gly	Gly	Pro	Ile	Pro	Lys	His
				85					90					95	
Trp	Leu	Gly	Asn	Ser	Tyr	Pro	Ile	Cys	Cys	Leu	Gly	Ser	Ala	Trp	Phe
			100					105					110		
Phe	Thr	His	Ile	Ser											
			115												

&lt;210&gt; 3591

&lt;211&gt; 669

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3591

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 669

&lt;210&gt; 3592

&lt;211&gt; 223

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3592

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		20						25					30		
Lys	Gln	Val	Asn	Trp	Lys	Ala	Cys	Arg	Trp	Ser	Ser	Ser	Gly	Val	Ile
		35					40					45			
Pro	Asn	Glu	Lys	Ile	Arg	Asn	Ile	Gly	Ile	Ser	Ala	His	Ile	Asp	Ser
	50					55				60					
Gly	Lys	Thr	Thr	Leu	Thr	Glu	Arg	Val	Leu	Tyr	Tyr	Thr	Gly	Arg	Ile
65				70					75					80	
Ala	Lys	Met	His	Glu	Val	Lys	Gly	Lys	Asp	Gly	Val	Gly	Ala	Val	Met
			85					90						95	
Asp	Ser	Met	Glu	Leu	Glu	Arg	Gln	Arg	Gly	Ile	Thr	Ile	Gln	Ser	Ala
		100						105					110		
Ala	Thr	Tyr	Thr	Met	Trp	Lys	Asp	Val	Asn	Ile	Asn	Ile	Ile	Asp	Thr
	115					120					125				
Pro	Gly	His	Val	Asp	Phe	Thr	Ile	Glu	Val	Glu	Arg	Ala	Leu	Arg	Val
	130				135					140					
Leu	Asp	Gly	Ala	Val	Leu	Val	Leu	Cys	Ala	Val	Gly	Gly	Val	Gln	Cys
145				150					155					160	
Gln	Thr	Met	Thr	Val	Asn	Arg	Gln	Met	Lys	Arg	Tyr	Asn	Val	Pro	Phe
		165						170					175		
Leu	Thr	Phe	Ile	Asn	Lys	Leu	Asp	Arg	Met	Gly	Ser	Asn	Pro	Ala	Arg
	180					185						190			
Ala	Leu	Gln	Gln	Met	Arg	Ser	Lys	Leu	Asn	His	Asn	Ala	Ala	Phe	Met
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 <211> 1005  
 <212> DNA  
 <213> Homo sapiens

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<210> 3594  
 <211> 282  
 <212> PRT  
 <213> Homo sapiens

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 Arg Ser Leu Ala Leu Ala Ala Ala Pro Ser Ser Asn Gly Ser Pro Trp  
 35 40 45  
 Arg Leu Leu Gly Ala Leu Cys Leu Gln Arg Pro Pro Val Val Ser Lys

50	55	60
Pro Leu Thr Pro Leu Gln Glu Glu Met Ala Ser Leu Leu Gln Gln Ile		
65	70	75
Glu Ile Glu Arg Ser Leu Tyr Ser Asp His Glu Leu Arg Ala Leu Asp		80
	85	90
Glu Asn Gln Arg Leu Ala Lys Lys Lys Ala Asp Leu His Asp Glu Glu		95
	100	105
Asp Glu Gln Asp Ile Leu Leu Ala Gln Asp Leu Glu Asp Met Trp Glu		110
	115	120
Gln Lys Phe Leu Gln Phe Lys Leu Gly Ala Arg Ile Thr Glu Ala Asp		125
	130	135
Glu Lys Asn Asp Arg Thr Ser Leu Asn Arg Lys Leu Asp Arg Asn Leu		140
145	150	155
Val Leu Leu Val Arg Glu Lys Phe Gly Asp Gln Asp Val Trp Ile Leu		160
	165	170
Pro Gln Ala Glu Trp Gln Pro Gly Glu Thr Leu Arg Gly Thr Ala Glu		175
	180	185
Arg Thr Leu Ala Thr Leu Ser Glu Asn Asn Met Glu Ala Lys Phe Leu		190
	195	200
Gly Asn Ala Pro Cys Gly His Tyr Thr Phe Lys Phe Pro Gln Ala Met		205
	210	215
Arg Thr Glu Ser Asn Leu Gly Ala Lys Val Phe Phe Phe Lys Ala Leu		220
225	230	235
Leu Leu Thr Gly Asp Phe Ser Gln Ala Gly Asn Lys Gly His His Val		240
	245	250
Trp Val Thr Lys Asp Glu Leu Gly Asp Tyr Leu Lys Pro Lys Tyr Leu		255
	260	265
Ala Gln Val Arg Arg Phe Val Ser Asp Leu		270
	275	280

&lt;210&gt; 3595

&lt;211&gt; 1903

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3595

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1903

&lt;210&gt; 3596

&lt;211&gt; 496

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3596

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Gln Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu			
	35	40	45
Ala His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro Ile			
	50	55	60
Val Glu Ser Tyr Ile Gly Phe Ile Glu Ser Tyr Arg Asp Pro Phe Gly			
65	70	75	80
Ser Arg Gly Glu Phe Glu Gly Phe Val Ala Val Val Asn Lys Ala Met			
	85	90	95
Ser Ala Lys Phe Glu Arg Leu Val Ala Ser Ala Glu Gln Leu Leu Lys			
	100	105	110
Glu Leu Pro Trp Pro Pro Thr Phe Glu Lys Asp Lys Phe Leu Thr Pro			
	115	120	125
Asp Phe Thr Ser Leu Asp Val Leu Thr Phe Ala Gly Ser Gly Ile Pro			
	130	135	140
Ala Gly Ile Asn Ile Pro Asn Tyr Asp Asp Leu Arg Gln Thr Glu Gly			
145	150	155	160
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Gln Arg Glu Lys Leu Thr Phe Leu Glu Glu Asp Asp Lys Asp Leu Tyr			
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Ile Leu Trp Lys Gly Pro Ser Phe Asp Val Gln Val Gly Leu His Glu			
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Leu Leu Gly His Gly Ser Gly Lys Leu Phe Val Gln Asp Glu Lys Gly			
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Gln Ile Gln Ser Trp Tyr Arg Ser Gly Glu Thr Trp Asp Ser Lys Phe			
	245	250	255
Ser Thr Ile Ala Ser Ser Tyr Glu Glu Cys Arg Ala Glu Ser Val Gly			
	260	265	270
Leu Tyr Leu Cys Leu His Pro Gln Val Leu Glu Ile Phe Gly Phe Glu			
	275	280	285
Gly Ala Asp Ala Glu Asp Val Ile Tyr Val Asn Trp Leu Asn Met Val			
	290	295	300
Arg Ala Gly Leu Leu Ala Leu Glu Phe Tyr Thr Pro Glu Ala Phe Asn			
305	310	315	320
Trp Arg Gln Ala His Met Gln Ala Arg Phe Val Ile Leu Arg Val Leu			
	325	330	335
Leu Glu Ala Gly Glu Gly Leu Val Thr Ile Thr Pro Thr Thr Gly Ser			
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Asp Gly Arg Pro Asp Ala Arg Val Arg Leu Asp Arg Ser Lys Ile Arg			
	355	360	365
Ser Val Gly Lys Pro Ala Leu Glu Arg Phe Leu Arg Arg Leu Gln Val			
	370	375	380
Leu Lys Ser Thr Gly Asp Val Ala Gly Gly Arg Ala Leu Tyr Glu Gly			
385	390	395	400
Tyr Ala Thr Val Thr Asp Ala Pro Pro Glu Cys Phe Leu Thr Leu Arg			
	405	410	415
Asp Thr Val Leu Leu Arg Lys Glu Ser Arg Lys Leu Ile Val Gln Pro			
	420	425	430
Asn Thr Arg Leu Glu Gly Asn Gly Ser Asp Val Gln Leu Leu Glu Tyr			

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Glu	Ala	Ser	Ala	Ala	Gly	Leu
					Ile	Arg
					Ser	Phe
					Ser	Glu
					Arg	Phe
					Pro	
	450		455		460	
Glu	Asp	Gly	Pro	Glu	Leu	Glu
					Ile	Leu
					Thr	Gln
					Leu	Ala
					Thr	Ala
465			470		475	
Asp	Ala	Arg	Phe	Trp	Lys	Gly
					Pro	Ser
					Glu	Ala
					Pro	Ser
					Gly	Gln
					Ala	
			485		490	
					495	

&lt;210&gt; 3597

&lt;211&gt; 1090

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3597

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&lt;210&gt; 3598

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 <212> PRT  
 <213> Homo sapiens

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 Pro Lys Thr Ala Leu Pro Phe Asn Arg Phe Leu Pro Asn Lys Ser Arg  
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 Gln Pro Ser Tyr Val Pro Ala Pro Leu Arg Lys Lys Lys Pro Asp Lys  
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 Asp Gly Thr Phe Ser Arg Ser Lys Ser Met Ser Asp Val Ser Ala Glu  
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 <213> Homo sapiens

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<210> 3600

<211> 98

<212> PRT

<213> Homo sapiens

<400> 3600

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		20						25					30		
Met	Val	Glu	Val	Arg	Ser	Trp	Ser	Gly	Ser	Leu	Val	Gly	Trp	Leu	Ala
	35					40					45				
Pro	Arg	Pro	Leu	Ser	Val	Pro	Ile	Glu	His	Leu	Leu	Gly	Ala	Lys	Asn
	50					55				60					
Cys	Cys	Arg	His	Gly	Gly	Gln	Trp	Val	Arg	Arg	Ala	Val	Pro	Ala	Val
65				70					75				80		
Leu	Ser	Leu	Val	Gly	Ala	Ser	Ser	Leu	His	His	Ala	Val	Tyr	Leu	Phe
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Leu Leu

<210> 3601

<211> 2963

<212> DNA

<213> Homo sapiens

<400> 3601

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 2963

&lt;210&gt; 3602

&lt;211&gt; 299

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3602

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			20					25					30		
Glu	Ala	Arg	Glu	Leu	Met	Tyr	Ser	Gly	Ala	Leu	Leu	Phe	Phe	Ser	His
			35					40					45		
Gly	Gln	Gln	Asn	Ser	Ala	Ala	Asp	Leu	Ser	Met	Leu	Val	Leu	Glu	Ser
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Leu	Glu	Lys	Ala	Glu	Val	Glu	Val	Ala	Asp	Glu	Leu	Leu	Glu	Asn	Leu
65					70				75					80	
Ala	Lys	Val	Phe	Ser	Leu	Met	Asp	Pro	Asn	Ser	Pro	Glu	Arg	Val	Thr
				85					90					95	
Phe	Val	Ser	Arg	Ala	Leu	Lys	Trp	Ser	Ser	Gly	Gly	Ser	Gly	Lys	Leu
			100					105					110		
Gly	His	Pro	Arg	Leu	His	Gln	Leu	Leu	Ala	Leu	Thr	Leu	Trp	Lys	Glu
			115				120						125		
Gln	Asn	Tyr	Cys	Glu	Ser	Arg	Tyr	His	Phe	Leu	His	Ser	Ala	Asp	Gly
			130				135					140			
Glu	Gly	Cys	Ala	Asn	Met	Leu	Val	Glu	Tyr	Ser	Thr	Ser	Arg	Gly	Phe
145					150				155					160	
Arg	Ser	Glu	Val	Asp	Met	Phe	Val	Ala	Gln	Ala	Val	Leu	Gln	Phe	Leu
				165					170					175	
Cys	Leu	Lys	Asn	Lys	Ser	Ser	Ala	Ser	Val	Val	Phe	Thr	Thr	Tyr	Thr
			180					185					190		
Gln	Lys	His	Pro	Ser	Ile	Glu	Asp	Gly	Pro	Pro	Phe	Val	Glu	Pro	Leu

195	200	205
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210	215	220
Thr Val Phe Thr Val Leu Cys Glu Gln Tyr Gln Pro Ser Leu Arg Arg		
225	230	235
Asp Pro Met Tyr Asn Glu Tyr Leu Asp Arg Ile Gly Gln Leu Phe Phe		240
	245	250
Gly Val Pro Pro Lys Gln Thr Ser Ser Tyr Gly Gly Leu Leu Gly Asn		255
	260	265
Leu Leu Thr Ser Leu Met Gly Ser Ser Glu Gln Glu Asp Gly Glu Glu		270
	275	280
Ser Pro Ser Asp Gly Ser Pro Ile Glu Leu Asp		285
290	295	

&lt;210&gt; 3603

&lt;211&gt; 1082

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3603

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 <212> PRT  
 <213> Homo sapiens

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 35 40 45  
 Ala Gly Val Ser Pro Arg Gly Val Lys Arg Gln Arg Arg Ser Ser Ser  
 50 55 60  
 Gly Gly Ser Gln Glu Lys Arg Gly Arg Pro Ser Gln Glu Pro Pro Leu  
 65 70 75 80  
 Ala Pro Pro His Arg Arg Arg Arg Ser Arg Gln His Pro Gly Pro Leu  
 85 90 95  
 Pro Pro Thr Asn Ala Ala Pro Thr Val Pro Gly Pro Val Glu Pro Leu  
 100 105 110  
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 <211> 2004  
 <212> DNA  
 <213> Homo sapiens

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2004

&lt;210&gt; 3606

&lt;211&gt; 324

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3606

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Lys Gly Asp Tyr Tyr Glu Ala His Gln Met Tyr Arg Thr Leu Phe Phe
      35           40           45
Arg Tyr Met Ser Gln Ser Lys His Thr Glu Ala Arg Glu Leu Met Tyr
      50           55           60
Ser Gly Ala Leu Leu Phe Phe Ser His Gly Gln Gln Asn Ser Ala Ala
      65           70           75           80
Asp Leu Ser Met Leu Val Leu Glu Ser Leu Glu Lys Ala Glu Val Glu
      85           90           95
Val Ala Asp Glu Leu Leu Glu Asn Leu Ala Lys Val Phe Ser Leu Met
      100          105          110
Asp Pro Asn Ser Pro Glu Arg Val Thr Phe Val Ser Arg Ala Leu Lys
      115          120          125
Trp Ser Ser Gly Gly Ser Gly Lys Leu Gly His Pro Arg Leu His Gln
      130          135          140
Leu Leu Ala Leu Thr Leu Trp Lys Glu Gln Asn Tyr Cys Glu Ser Arg
      145          150          155          160
Tyr His Phe Leu His Ser Ala Asp Gly Glu Gly Cys Ala Asn Met Leu
      165          170          175
Val Glu Tyr Ser Thr Ser Arg Gly Phe Arg Ser Glu Val Asp Met Phe
      180          185          190
Val Ala Gln Ala Val Leu Gln Phe Leu Cys Leu Lys Asn Lys Ser Ser
      195          200          205
Ala Ser Val Val Phe Thr Thr Tyr Thr Gln Lys His Pro Ser Ile Glu
      210          215          220
Asp Gly Pro Pro Phe Val Glu Pro Leu Leu Asn Phe Ile Trp Phe Leu
      225          230          235          240
Leu Leu Ala Val Asp Gly Gly Lys Leu Thr Val Phe Thr Val Leu Cys
      245          250          255
Glu Gln Tyr Gln Pro Ser Leu Arg Arg Asp Pro Met Tyr Asn Glu Tyr
      260          265          270
Leu Asp Arg Ile Gly Gln Leu Phe Phe Gly Val Pro Pro Lys Gln Thr
      275          280          285
Ser Ser Tyr Gly Gly Leu Leu Gly Asn Leu Leu Thr Ser Leu Met Gly
      290          295          300
Ser Ser Glu Gln Glu Asp Gly Glu Glu Ser Pro Ser Asp Gly Ser Pro
      305          310          315          320
Ile Glu Leu Asp

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&lt;210&gt; 3607

&lt;211&gt; 1726

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3607

nacgcgtcgt gggagttggg ggaccccaca ccggacttgc aggcactggt tgttcagttt  
60  
aacgaccaat tcttctgggg ccagctggag gccgtcgagg tgaagtggag cgtgcgaatg  
120  
accctgtgtg ctgggatatg cagctatgaa ggggaagggtg gaatgtgttc catccgtctc  
180  
agcgaacccc ttttgaagtt gaggccaaga aaggatcttg tagagaccct cctgcatgaa  
240  
atgatacatg cctatttatt tgtcactaat aacgacaaag accgagaagg gcatgggtcca  
300  
gaattttgta aacatatgca tcgcatcaac agcctgactg gagccaatat aacgggtatac  
360  
catacttttc acgatgaggt ggatgagtat cggcgacact ggtggcgctg caatgggccg  
420  
tgccagcaca ggccaccgta ttacggctat gtcaaacgag ctactaacag ggaaccctct  
480  
gctcatgact attggtgggc tgagcaccag aaaacctgtg gaggcactta cataaaaatc  
540  
aaggaaccag agaattactc aaaaaaaggc aaaggaaagg caaaactagg aaaggaacca  
600  
gtattggccg cagagaataa agataaaccc aacagaggtg aggccagct agtaatccct  
660  
tttagtggga aaggatatgt tctaggagaa acaagcaatt taccttcacc tgggaaactg  
720  
atcacttcac atgccattaa taaaacccaa gatcttttaa atcaaaacca ttcagcaaat  
780  
gctgtaagac ctaattctaa aatcaagggtg aaatttgaac agaatgggtc aagtaaaaaat  
840  
tctcatctgg tctcccctgc tgtagtaac agtcaccaa atgttctaag caactacttt  
900  
cctagagtat catttgccaa ccaaaaggct ttcagaggtg tgaatggatc tccaaggata  
960  
agtgtaacag ttggcaacat ccctaaaaac tcagtctctt ctagttctca gagaagggtt  
1020  
tcatcttcta agatatccct aagaaattct tcaaaagtaa cggaatcagc atctgtgatg  
1080  
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1140  
gataagactg tttttgacaa tttttttatc aagaaagagc aaataaaaag cagtggtaat  
1200  
gatccaaagt atagtacaac cacagctcag aattccagca gttcatccag tcagagcaaa  
1260  
atgggttaatt gccagtttg tcagaatgaa gttctgggag tctcagatta atgagcactt  
1320  
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1380  
gtttcaaagt ctcaagtacc acctgtatta tctcactaat gtgctatgtc agccagtcag  
1440  
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1500  
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gtgctacatt cactcttgcc ttaggtatac tgtaaccag gttctgctg tegtgtataa  
1620

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 1726

<210> 3608

<211> 436

<212> PRT

<213> Homo sapiens

<400> 3608

Xaa	Ala	Ser	Trp	Glu	Leu	Val	Asp	Pro	Thr	Pro	Asp	Leu	Gln	Ala	Leu
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Phe	Val	Gln	Phe	Asn	Asp	Gln	Phe	Phe	Trp	Gly	Gln	Leu	Glu	Ala	Val
		20						25					30		
Glu	Val	Lys	Trp	Ser	Val	Arg	Met	Thr	Leu	Cys	Ala	Gly	Ile	Cys	Ser
		35					40					45			
Tyr	Glu	Gly	Lys	Gly	Gly	Met	Cys	Ser	Ile	Arg	Leu	Ser	Glu	Pro	Leu
	50					55					60				
Leu	Lys	Leu	Arg	Pro	Arg	Lys	Asp	Leu	Val	Glu	Thr	Leu	Leu	His	Glu
65					70					75				80	
Met	Ile	His	Ala	Tyr	Leu	Phe	Val	Thr	Asn	Asn	Asp	Lys	Asp	Arg	Glu
			85						90					95	
Gly	His	Gly	Pro	Glu	Phe	Cys	Lys	His	Met	His	Arg	Ile	Asn	Ser	Leu
			100						105				110		
Thr	Gly	Ala	Asn	Ile	Thr	Val	Tyr	His	Thr	Phe	His	Asp	Glu	Val	Asp
	115						120					125			
Glu	Tyr	Arg	Arg	His	Trp	Trp	Arg	Cys	Asn	Gly	Pro	Cys	Gln	His	Arg
	130					135					140				
Pro	Pro	Tyr	Tyr	Gly	Tyr	Val	Lys	Arg	Ala	Thr	Asn	Arg	Glu	Pro	Ser
145					150					155				160	
Ala	His	Asp	Tyr	Trp	Trp	Ala	Glu	His	Gln	Lys	Thr	Cys	Gly	Gly	Thr
			165						170					175	
Tyr	Ile	Lys	Ile	Lys	Glu	Pro	Glu	Asn	Tyr	Ser	Lys	Lys	Gly	Lys	Gly
		180						185					190		
Lys	Ala	Lys	Leu	Gly	Lys	Glu	Pro	Val	Leu	Ala	Ala	Glu	Asn	Lys	Asp
	195						200					205			
Lys	Pro	Asn	Arg	Gly	Glu	Ala	Gln	Leu	Val	Ile	Pro	Phe	Ser	Gly	Lys
	210					215					220				
Gly	Tyr	Val	Leu	Gly	Glu	Thr	Ser	Asn	Leu	Pro	Ser	Pro	Gly	Lys	Leu
225				230						235				240	
Ile	Thr	Ser	His	Ala	Ile	Asn	Lys	Thr	Gln	Asp	Leu	Leu	Asn	Gln	Asn
			245						250					255	
His	Ser	Ala	Asn	Ala	Val	Arg	Pro	Asn	Ser	Lys	Ile	Lys	Val	Lys	Phe
		260						265					270		
Glu	Gln	Asn	Gly	Ser	Ser	Lys	Asn	Ser	His	Leu	Val	Ser	Pro	Ala	Val
		275					280					285			
Ser	Asn	Ser	His	Gln	Asn	Val	Leu	Ser	Asn	Tyr	Phe	Pro	Arg	Val	Ser
	290					295					300				
Phe	Ala	Asn	Gln	Lys	Ala	Phe	Arg	Gly	Val	Asn	Gly	Ser	Pro	Arg	Ile
305				310						315				320	
Ser	Val	Thr	Val	Gly	Asn	Ile	Pro	Lys	Asn	Ser	Val	Ser	Ser	Ser	Ser
			325						330					335	
Gln	Arg	Arg	Val	Ser	Ser	Ser	Lys	Ile	Ser	Leu	Arg	Asn	Ser	Ser	Lys

```

          340          345          350
Val Thr Glu Ser Ala Ser Val Met Pro Ser Gln Asp Val Ser Gly Ser
          355          360          365
Glu Asp Thr Phe Pro Asn Lys Arg Pro Arg Leu Glu Asp Lys Thr Val
          370          375          380
Phe Asp Asn Phe Phe Ile Lys Lys Glu Gln Ile Lys Ser Ser Gly Asn
          385          390          395          400
Asp Pro Lys Tyr Ser Thr Thr Thr Ala Gln Asn Ser Ser Ser Ser Ser
          405          410          415
Ser Gln Ser Lys Met Val Asn Cys Pro Val Cys Gln Asn Glu Val Leu
          420          425          430
Gly Val Ser Asp
          435

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&lt;210&gt; 3609

&lt;211&gt; 1286

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3609

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ntcttgcaact taagttgccc ttgaagatgg ttntgccttg ggcctggaac cccgagggag
60
ttcagcttca ccaaaccatc ccaagctttc cgtgcaactga gagacatgct ggccctggcc
120
tgcgtcaacc agtgggagca gctgaggggg cgggtggca acgaggatgg gccacagaag
180
ctggacttgg aagctgatgc tgagcccaa gacctcgaga gtacgaacct cttggagagt
240
gaagctccca gggactatct cctcaagttt gcctatattg tggatttggg cagcgacaca
300
gcagacaagt tctgcagct gntttggaac caaagggtgc aagaggggtgc tgtgtcctat
360
caannctacc cctgtgcgcc caccgcttc acccattgtg agcaggtgct gggcgagggg
420
gccctggacc gaggcaccta ctactgggag gtggagatta tcgagggtct ggtcagcatg
480
ggggtcatgg ccgcagactt ctcccacaa gagccctacg accgcggccg gctgggcccg
540
aacgccact cctgctgcct gcagtggaat ggacgcagct tctccgtctg gtttcatggg
600
ctggaggctc ccctgcccc ccccttctcg cccacgggtg gggctctgctt ggaatacgt
660
gaccgtgctt tggccttcta tgctgtacgg gacggcaaga tgagcctcct gcggaggctg
720
aaggcctccc ggccccgccc ggggtggcatc ccggcctccc ccattgaccc cttccagagc
780
cgctggaca gtcactttgc ggggtctctc acccacagac tcaagcctgc cttcttcctg
840
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900
aagaggaggt gatgccgggc acgggcgctc ctgctgccgt ctctgctcca ggaagctgcc
960
tcctctgggc cctctccttc gtctgggaag gcaccagcat ggtccca caccagcct
1020

```

tctcatttct agaggtctcc acctttttat acactcagcc ttccctctcc caggcaggag  
 1080  
 gacccccaga ccctgttccc ctgcagacct cacttctggg agacagagct acagctggga  
 1140  
 cagctccaag ctaccctaac ccttcctttc ccaggtttct agaatagtgt ctggcatgta  
 1200  
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 1260  
 ccgctaattt agtagtagta gtaggc  
 1286

<210> 3610

<211> 268

<212> PRT

<213> Homo sapiens

<400> 3610

Met	Leu	Ala	Val	Ala	Cys	Val	Asn	Gln	Trp	Glu	Gln	Leu	Arg	Gly	Pro
1				5					10					15	
Gly	Gly	Asn	Glu	Asp	Gly	Pro	Gln	Lys	Leu	Asp	Leu	Glu	Ala	Asp	Ala
		20					25					30			
Glu	Pro	Gln	Asp	Leu	Glu	Ser	Thr	Asn	Leu	Leu	Glu	Ser	Glu	Ala	Pro
		35					40					45			
Arg	Asp	Tyr	Phe	Leu	Lys	Phe	Ala	Tyr	Ile	Val	Asp	Leu	Asp	Ser	Asp
	50					55					60				
Thr	Ala	Asp	Lys	Phe	Leu	Gln	Leu	Xaa	Trp	Asn	Gln	Arg	Cys	Gln	Glu
65				70					75					80	
Gly	Ala	Val	Ser	Tyr	Gln	Xaa	Tyr	Pro	Leu	Ser	Pro	Thr	Arg	Phe	Thr
			85					90						95	
His	Cys	Glu	Gln	Val	Leu	Gly	Glu	Gly	Ala	Leu	Asp	Arg	Gly	Thr	Tyr
		100						105					110		
Tyr	Trp	Glu	Val	Glu	Ile	Ile	Glu	Gly	Trp	Val	Ser	Met	Gly	Val	Met
	115						120					125			
Ala	Ala	Asp	Phe	Ser	Pro	Gln	Glu	Pro	Tyr	Asp	Arg	Gly	Arg	Leu	Gly
	130					135					140				
Arg	Asn	Ala	His	Ser	Cys	Cys	Leu	Gln	Trp	Asn	Gly	Arg	Ser	Phe	Ser
145				150					155					160	
Val	Trp	Phe	His	Gly	Leu	Glu	Ala	Pro	Leu	Pro	His	Pro	Phe	Ser	Pro
			165						170					175	
Thr	Val	Gly	Val	Cys	Leu	Glu	Tyr	Ala	Asp	Arg	Ala	Leu	Ala	Phe	Tyr
		180						185					190		
Ala	Val	Arg	Asp	Gly	Lys	Met	Ser	Leu	Leu	Arg	Arg	Leu	Lys	Ala	Ser
	195						200					205			
Arg	Pro	Arg	Arg	Gly	Gly	Ile	Pro	Ala	Ser	Pro	Ile	Asp	Pro	Phe	Gln
	210					215					220				
Ser	Arg	Leu	Asp	Ser	His	Phe	Ala	Gly	Leu	Phe	Thr	His	Arg	Leu	Lys
225				230					235					240	
Pro	Ala	Phe	Phe	Leu	Glu	Ser	Val	Asp	Ala	His	Leu	Gln	Ile	Gly	Pro
			245						250					255	
Leu	Lys	Lys	Ser	Cys	Ile	Ser	Val	Leu	Lys	Arg	Arg				
			260					265							

<210> 3611

<211> 816

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3611

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 60  
 agctacaaag ggatcttcca gtatgactac catgataaag tgaagccaag aaagatatc  
 120  
 caatggagac agttggaaaa cctgtacttc agagaaaaga agttttccgt ggaagttcat  
 180  
 gacccacgca gggcttcagt gacaaggagg acgtttgggc acagcggcat tgcagtgcac  
 240  
 acgtgggtatg catgtccggc attgatcaag tccatctggg ctatggccat aagccaacac  
 300  
 cagttctatc tggacagaaa gcagagtaag tccaaaatcc atgcagcacg cagcctgagt  
 360  
 gagatcgcca tcgacctgac cgagacgggg acgctgaaga cctcgaagct ggccaacatg  
 420  
 ggtagcaagg ggaagatcat cagcggcagc agcggcagcc tgctgtcttc aggttctcag  
 480  
 gaatcagata gctcgcagtc ggccaagaag gacatgctgg ctgccttgaa gtccaggcag  
 540  
 gaagctctgg aggaaacct gcgtcagagg ctggaggaac tgaagaagct gtgtctccga  
 600  
 gaagctgagc tcacgggcaa gctgccagta gaatatcccc tggatccagg ggaggaacca  
 660  
 cccattgttc ggagaagaat aggaacagcc ttcaaactgg atgaacagaa aatcctgccc  
 720  
 aaaggagagg aagctgaact ggaacgcctg gaacgagagt ttgccattca gtcccagatt  
 780  
 acggaggccg cccgccgcct agccagtgc cccaac  
 816

&lt;210&gt; 3612

&lt;211&gt; 272

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3612

Tyr	Gly	Val	His	Tyr	Tyr	Ala	Val	Lys	Asp	Lys	Gln	Gly	Ile	Pro	Trp
1			5						10					15	
Trp	Leu	Gly	Leu	Ser	Tyr	Lys	Gly	Ile	Phe	Gln	Tyr	Asp	Tyr	His	Asp
		20						25					30		
Lys	Val	Lys	Pro	Arg	Lys	Ile	Phe	Gln	Trp	Arg	Gln	Leu	Glu	Asn	Leu
		35					40					45			
Tyr	Phe	Arg	Glu	Lys	Lys	Phe	Ser	Val	Glu	Val	His	Asp	Pro	Arg	Arg
	50					55					60				
Ala	Ser	Val	Thr	Arg	Arg	Thr	Phe	Gly	His	Ser	Gly	Ile	Ala	Val	His
65					70					75				80	
Thr	Trp	Tyr	Ala	Cys	Pro	Ala	Leu	Ile	Lys	Ser	Ile	Trp	Ala	Met	Ala
			85					90					95		
Ile	Ser	Gln	His	Gln	Phe	Tyr	Leu	Asp	Arg	Lys	Gln	Ser	Lys	Ser	Lys
		100						105				110			
Ile	His	Ala	Ala	Arg	Ser	Leu	Ser	Glu	Ile	Ala	Ile	Asp	Leu	Thr	Glu

```

      115      120      125
Thr Gly Thr Leu Lys Thr Ser Lys Leu Ala Asn Met Gly Ser Lys Gly
  130      135      140
Lys Ile Ile Ser Gly Ser Ser Gly Ser Leu Leu Ser Ser Gly Ser Gln
  145      150      155      160
Glu Ser Asp Ser Ser Gln Ser Ala Lys Lys Asp Met Leu Ala Ala Leu
      165      170      175
Lys Ser Arg Gln Glu Ala Leu Glu Glu Thr Leu Arg Gln Arg Leu Glu
      180      185      190
Glu Leu Lys Lys Leu Cys Leu Arg Glu Ala Glu Leu Thr Gly Lys Leu
      195      200      205
Pro Val Glu Tyr Pro Leu Asp Pro Gly Glu Glu Pro Pro Ile Val Arg
      210      215      220
Arg Arg Ile Gly Thr Ala Phe Lys Leu Asp Glu Gln Lys Ile Leu Pro
  225      230      235      240
Lys Gly Glu Glu Ala Glu Leu Glu Arg Leu Glu Arg Glu Phe Ala Ile
      245      250      255
Gln Ser Gln Ile Thr Glu Ala Ala Arg Arg Leu Ala Ser Asp Pro Asn
      260      265      270

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&lt;210&gt; 3613

&lt;211&gt; 659

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3613

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acgcgtaaaag ttgcctttca agctctggcc tccgggcacg cgatgctccg cggcgggctg
60
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120
cacctggatc cctgcagccc agcctggaat gcgtctggat taggggaaag acgagaaacg
180
aactccagg tgttgacagg cccaccaaag cgggaagata gggcagttgc tcagaccaa
240
tactgtatct agtgcttctg ctctatctt caatcgtggg gttcttttta atgcaaagt
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360
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420
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480
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600
ctcacacaca ctcatacaca cgcacgcaaa cgcggtcgga gaagagccc cccccccc
659

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&lt;210&gt; 3614

&lt;211&gt; 123

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3614

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Met Gln Ser Val Thr Arg Pro Gly Ile Pro Met Cys Ala Gln Leu Ala
 1           5           10           15
His Ser Ile Ile Val Pro Arg Lys Leu Leu Gln Phe Ile Lys Ser Ser
      20           25           30
Gly Leu Gly Ile Ser Leu Asn Ser Lys Arg Arg Lys Glu Glu Thr Phe
      35           40           45
Pro Thr Arg Cys Gly Cys Asp Ala Ser Gln Gly Pro Gln Gly His Cys
      50           55           60
Pro Arg Ala His Arg Pro Pro Leu Thr Ala Thr Gly Ala Trp Ile Arg
      65           70           75           80
Ser Tyr Ile Val Gln Ser Phe Arg Pro Leu Pro Trp Ser Thr Arg Thr
      85           90           95
Arg Ala Arg Ile Ser Gly Arg Ala His Thr His Ser Tyr Thr Arg Thr
      100          105          110
Gln Thr Arg Ser Glu Lys Ser Pro Pro Pro
      115          120

```

&lt;210&gt; 3615

&lt;211&gt; 1388

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3615

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nnggcagagc ctcccgaaga aaaggagacc gcgcagcgcc tacgggagtc cggcggcagc
60
agccggtacc ggcaaccacg ggcagctctc agggaatctc cgtcgtgagg ccagaggctc
120
cagtccccgc gagtccagat gcctgtccag cctccaagca aagacacaga agagatggaa
180
gcagaggggtg attctgctgc tgagatgaat ggggaggagg aagagagtga ggaggagcgg
240
agcggcagcc agacagagtc agaagaggag agctccgaga tggatgatga ggactatgag
300
cgacgccgca gcgagtgtgt cagtgagatg ctggacctag agaagcagtt ctcggagcta
360
aaggagaagt tgttcaggga acgactgagt cagctgcggt tgcggctgga ggaagtgggg
420
gctgagagag cccctgaata cacggagccc cttggggggc tgcagcggag cctcaagatt
480
cgattcagg tggcagggat ctacaagggc ttctgtctgg atgtgatcag gaataagtac
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720
gactccctgc cgcccagcaa gaggaagaag gcacctctgg tttctggccc atacatcgtg
780
tacatgcttc aagagatcgg catcctggag gactggacag ccatcaaaaa ggctagggca
840
gctgtgtccc ctcaagaag aaaatcggat gacaggcgga cccacaggcc cctcagggtc
900

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 1020  
 gcaaggtgct tgtctccatc cctgagccgc ctgccacctc ccactcctga agatccatct  
 1080  
 cttggggctc ccctgacaga gaagacagcc gaagtcaaag ccacatcctc ttgctgatgt  
 1140  
 tggatgcagg ctgtccggcc tcagggccag ggagccagtt tccactgtgc gggaactctg  
 1200  
 agtcagacgt gattatctgg gggctgtgcc accctggctg gatctggagg caagatgcca  
 1260  
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 1320  
 aattaaaacc tttcctggga ctctggaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
 1380  
 aaaaaaaaa  
 1388

&lt;210&gt; 3616

&lt;211&gt; 290

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3616

Met	Pro	Val	Gln	Pro	Ser	Lys	Asp	Thr	Glu	Glu	Met	Glu	Ala	Glu
1			5					10					15	
Gly	Asp	Ser	Ala	Glu	Met	Asn	Gly	Glu	Glu	Glu	Ser	Glu	Glu	
			20				25				30			
Glu	Arg	Ser	Gly	Ser	Gln	Thr	Glu	Ser	Glu	Glu	Ser	Ser	Glu	Met
			35			40					45			
Asp	Asp	Glu	Asp	Tyr	Glu	Arg	Arg	Arg	Ser	Glu	Cys	Val	Ser	Glu
	50					55					60			
Leu	Asp	Leu	Glu	Lys	Gln	Phe	Ser	Glu	Leu	Lys	Glu	Lys	Leu	Phe
65					70					75				80
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Arg	Ala	Pro	Glu	Tyr	Thr	Glu	Pro	Leu	Gly	Gly	Leu	Gln	Arg	Ser
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Lys	Ile	Arg	Ile	Gln	Val	Ala	Gly	Ile	Tyr	Lys	Gly	Phe	Cys	Leu
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Leu	Glu	Ser	Glu	Lys	Leu	Leu	Leu	Tyr	Asp	Thr	Leu	Gln	Gly	Glu
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Gln	Glu	Arg	Ile	Gln	Arg	Leu	Glu	Glu	Asp	Arg	Gln	Ser	Leu	Asp
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Ser	Ser	Glu	Trp	Trp	Asp	Asp	Lys	Leu	His	Ala	Arg	Gly	Ser	Ser
		180					185					190		
Ser	Trp	Asp	Ser	Leu	Pro	Pro	Ser	Lys	Arg	Lys	Lys	Ala	Pro	Leu
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Ser	Gly	Pro	Tyr	Ile	Val	Tyr	Met	Leu	Gln	Glu	Ile	Gly	Ile	Leu
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<211> 948
<212> DNA
<213> Homo sapiens
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<210> 3620

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3620

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Thr	Ala	Ser	Thr	Pro	Thr	Thr	Ser	Cys	Thr	Ser	Phe	Met	Thr	Thr	Cys
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Cys	His	Ser	Ser	Thr	Pro	Cys	Gly	Ser	Phe	Pro	Ala	Trp	Pro	Thr	Arg
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<210> 3621

<211> 2934

<212> DNA

<213> Homo sapiens

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<211> 228

<212> PRT

<213> Homo sapiens

<400> 3622

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Leu	His	Leu	Ala	Ala	Ala	Arg	Gly	Asn	Val	Asp	Ile	Cys	Gln	Leu	Leu
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His	Lys	Phe	Gly	Ala	Asp	Leu	Leu	Ala	Thr	Asp	Tyr	Gln	Gly	Asn	Thr
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Ala	Leu	His	Leu	Cys	Gly	His	Val	Asp	Thr	Ile	Gln	Phe	Leu	Val	Ser
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		115					120					125			
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 Trp Arg Val Leu Leu Leu Ile Phe Val Ile Ala Leu Leu Ser Leu Gly  
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<210> 3623

<211> 586

<212> DNA

<213> Homo sapiens

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<210> 3624

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3624

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 Arg Asp Ile Thr Lys Glu Glu Ile Ser Lys Phe Ser Lys Ala Glu Trp  
 35 40 45  
 Glu Lys Lys Arg Met Asp Lys Ala Ile Gly Tyr Ser Phe Ala Ile Val  
 50 55 60  
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 4680  
 gtcagtgttt gagcctcttc gttccccctca cgcacccgtc acgcaccctc ggtgaatcct  
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 4799

<210> 3626

<211> 551

<212> PRT

<213> Homo sapiens

<400> 3626

Met	Ser	Thr	Ser	Ser	Leu	Arg	Arg	Gln	Met	Lys	Asn	Ile	Val	His	Asn
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Tyr	Ser	Glu	Ala	Glu	Ile	Lys	Val	Arg	Glu	Ala	Thr	Ser	Asn	Asp	Pro
		20					25						30		
Trp	Gly	Pro	Ser	Ser	Ser	Leu	Met	Ser	Glu	Ile	Ala	Asp	Leu	Thr	Tyr
		35				40						45			
Asn	Val	Val	Ala	Phe	Ser	Glu	Ile	Met	Ser	Met	Ile	Trp	Lys	Arg	Leu
	50				55						60				
Asn	Asp	His	Gly	Lys	Asn	Trp	Arg	His	Val	Tyr	Lys	Ala	Met	Thr	Leu
65				70					75					80	
Met	Glu	Tyr	Leu	Ile	Lys	Thr	Gly	Ser	Glu	Arg	Val	Ser	Gln	Gln	Cys
			85					90						95	
Lys	Glu	Asn	Met	Tyr	Ala	Val	Gln	Thr	Leu	Lys	Asp	Phe	Gln	Tyr	Val
		100					105						110		
Asp	Arg	Asp	Gly	Lys	Asp	Gln	Gly	Val	Asn	Val	Arg	Glu	Lys	Ala	Lys
		115				120					125				
Gln	Leu	Val	Ala	Leu	Leu	Arg	Asp	Glu	Asp	Arg	Leu	Arg	Glu	Glu	Arg
	130					135					140				
Ala	His	Ala	Leu	Lys	Thr	Lys	Glu	Lys	Leu	Ala	Gln	Thr	Ala	Thr	Ala
145				150						155				160	
Ser	Ser	Ala	Ala	Val	Gly	Ser	Gly	Pro	Pro	Pro	Glu	Ala	Glu	Gln	Ala
			165					170						175	
Trp	Pro	Gln	Ser	Ser	Gly	Glu	Glu	Glu	Leu	Gln	Leu	Gln	Leu	Ala	Leu
		180						185					190		
Ala	Met	Ser	Lys	Glu	Glu	Ala	Asp	Gln	Glu	Glu	Arg	Ile	Arg	Arg	Gly
	195					200						205			
Asp	Asp	Leu	Arg	Leu	Gln	Met	Ala	Ile	Glu	Glu	Ser	Lys	Arg	Glu	Thr
	210				215							220			
Gly	Gly	Lys	Glu	Glu	Ser	Leu	Met	Asp	Leu	Ala	Asp	Val	Phe	Thr	
225				230					235					240	
Ala	Pro	Ala	Pro	Ala	Pro	Thr	Thr	Asp	Pro	Trp	Gly	Gly	Pro	Ala	Pro
			245					250						255	
Met	Ala	Ala	Ala	Val	Pro	Thr	Ala	Ala	Pro	Thr	Ser	Asp	Pro	Trp	Gly

260 265 270  
 Gly Pro Pro Val Pro Pro Ala Ala Asp Pro Trp Gly Gly Pro Ala Pro  
 275 280 285  
 Thr Pro Ala Ser Gly Asp Pro Trp Arg Pro Ala Ala Pro Ala Gly Pro  
 290 295 300  
 Ser Val Asp Pro Trp Gly Gly Thr Pro Ala Pro Ala Ala Gly Glu Gly  
 305 310 315 320  
 Pro Thr Pro Asp Pro Trp Gly Ser Ser Asp Gly Gly Val Pro Val Ser  
 325 330 335  
 Gly Pro Ser Ala Ser Asp Pro Trp Thr Pro Ala Pro Ala Phe Ser Asp  
 340 345 350  
 Pro Trp Gly Gly Ser Pro Ala Lys Pro Ser Thr Asn Gly Thr Thr Thr  
 355 360 365  
 Ala Gly Gly Phe Asp Thr Glu Pro Asp Glu Phe Ser Asp Phe Asp Arg  
 370 375 380  
 Leu Arg Thr Ala Leu Pro Thr Ser Gly Ser Ser Ala Gly Glu Leu Glu  
 385 390 395 400  
 Leu Leu Ala Gly Glu Val Pro Ala Arg Ser Pro Gly Ala Phe Asp Met  
 405 410 415  
 Ser Gly Val Arg Gly Ser Leu Ala Glu Ala Val Gly Ser Pro Pro Pro  
 420 425 430  
 Ala Ala Thr Pro Thr Pro Thr Pro Pro Thr Arg Lys Thr Pro Glu Ser  
 435 440 445  
 Phe Leu Gly Pro Asn Ala Ala Leu Val Asp Leu Asp Ser Leu Val Ser  
 450 455 460  
 Arg Pro Gly Pro Thr Pro Pro Gly Ala Lys Ala Ser Asn Pro Phe Leu  
 465 470 475 480  
 Pro Gly Gly Gly Pro Ala Thr Gly Pro Ser Val Thr Asn Pro Phe Gln  
 485 490 495  
 Pro Ala Pro Pro Ala Thr Leu Thr Leu Asn Gln Leu Arg Leu Ser Pro  
 500 505 510  
 Val Pro Pro Val Pro Gly Ala Pro Pro Thr Tyr Ile Ser Pro Leu Gly  
 515 520 525  
 Gly Gly Pro Gly Leu Pro Pro Met Met Pro Pro Gly Pro Pro Ala Pro  
 530 535 540  
 Asn Thr Asn Pro Phe Leu Leu  
 545 550

&lt;210&gt; 3627

&lt;211&gt; 1760

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3627

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 gcagagagtg aggaagaaga tgaaatggaa gttgaagacc aggatagtaa agaagccaaa  
 120  
 aaaccaaaca tcataaattt tgacaccagt ctgccgacat cacatacata cctaggtgct  
 180  
 gatatggaag aatttcattg caggactttg cacgatgacg acagctgtca ggtgattcca  
 240  
 gttcttcac aagtgatgat gacctgatt cccggacaga cattacctct tcagcttttt  
 300

caccctcaag aagtcagtat ggtgcggaat ttaattcaga aagatagaac ctttgctgtt  
360  
cttgcataca gcaatgtaca ggaaagggaa gcacagtttg gaacaacagc agagatatat  
420  
gcctatcgag aagaacagga ttttggaatt gagatagtga aagtgaagc aattggaaga  
480  
caaagggttca aagtccttga gctaagaaca cagtcagatg gaatccagca agctaaagtg  
540  
caaattcttc ccgaatgtgt gttgccttca accatgtctg cagttcaatt agaatccctc  
600  
aataagtgcc agatatttcc ttcaaacct gtctcaagag aagaccaatg ttcataataa  
660  
tggtggcaga aataccagaa gagaaagttt cattgtgcaa atctaacttc atggcctcgc  
720  
tggtgtatt ccttatatga tgctgagacc ttaatggaca gaatcaagaa acagctacgt  
780  
gaatgggatg aaaatctaaa agatgattct ctcccttcaa atccaataga ttttcttac  
840  
agagtagctg cttgtcttcc tattgatgat gtattgagaa ttcagctcct taaaattggc  
900  
agtgtatcc agcgacttcg ctgtgaatta gacattatga ataaatgtac ttcctttgc  
960  
tgtaacaat gtcaagaaac agaaataaca accaaaaatg aaatattcag tttatcctta  
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1080  
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1140  
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1200  
acggccacca aaaaagacat gtcacctcaa aaattttggg gcttaacgag atctgctctg  
1260  
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taaacagatg tgatagagat aaagttagtt atctaacaaa ttggttatat tctaagatct  
1380  
gctttggaat ttattgcctc tgatacatc ctaagtaaac ataacattaa tacctaagta  
1440  
aacataacat tacttggagg gttgcagttt ctaagtgaat ctgtatttga aacttttaag  
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1620  
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1680  
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1740  
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1760

&lt;210&gt; 3628

&lt;211&gt; 440

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3628

Gly Glu Gly Asp Gln Gln Asp Ala Ala His Asn Met Gly Asn His Leu  
 1 5 10 15  
 Pro Leu Leu Pro Ala Glu Ser Glu Glu Glu Asp Glu Met Glu Val Glu  
 20 25 30  
 Asp Gln Asp Ser Lys Glu Ala Lys Lys Pro Asn Ile Ile Asn Phe Asp  
 35 40 45  
 Thr Ser Leu Pro Thr Ser His Thr Tyr Leu Gly Ala Asp Met Glu Glu  
 50 55 60  
 Phe His Gly Arg Thr Leu His Asp Asp Asp Ser Cys Gln Val Ile Pro  
 65 70 75 80  
 Val Leu Pro Gln Val Met Met Ile Leu Ile Pro Gly Gln Thr Leu Pro  
 85 90 95  
 Leu Gln Leu Phe His Pro Gln Glu Val Ser Met Val Arg Asn Leu Ile  
 100 105 110  
 Gln Lys Asp Arg Thr Phe Ala Val Leu Ala Tyr Ser Asn Val Gln Glu  
 115 120 125  
 Arg Glu Ala Gln Phe Gly Thr Thr Ala Glu Ile Tyr Ala Tyr Arg Glu  
 130 135 140  
 Glu Gln Asp Phe Gly Ile Glu Ile Val Lys Val Lys Ala Ile Gly Arg  
 145 150 155 160  
 Gln Arg Phe Lys Val Leu Glu Leu Arg Thr Gln Ser Asp Gly Ile Gln  
 165 170 175  
 Gln Ala Lys Val Gln Ile Leu Pro Glu Cys Val Leu Pro Ser Thr Met  
 180 185 190  
 Ser Ala Val Gln Leu Glu Ser Leu Asn Lys Cys Gln Ile Phe Pro Ser  
 195 200 205  
 Lys Pro Val Ser Arg Glu Asp Gln Cys Ser Tyr Lys Trp Trp Gln Lys  
 210 215 220  
 Tyr Gln Lys Arg Lys Phe His Cys Ala Asn Leu Thr Ser Trp Pro Arg  
 225 230 235 240  
 Trp Leu Tyr Ser Leu Tyr Asp Ala Glu Thr Leu Met Asp Arg Ile Lys  
 245 250 255  
 Lys Gln Leu Arg Glu Trp Asp Glu Asn Leu Lys Asp Asp Ser Leu Pro  
 260 265 270  
 Ser Asn Pro Ile Asp Phe Ser Tyr Arg Val Ala Ala Cys Leu Pro Ile  
 275 280 285  
 Asp Asp Val Leu Arg Ile Gln Leu Leu Lys Ile Gly Ser Ala Ile Gln  
 290 295 300  
 Arg Leu Arg Cys Glu Leu Asp Ile Met Asn Lys Cys Thr Ser Leu Cys  
 305 310 315 320  
 Cys Lys Gln Cys Gln Glu Thr Glu Ile Thr Thr Lys Asn Glu Ile Phe  
 325 330 335  
 Ser Leu Ser Leu Cys Gly Pro Met Ala Ala Tyr Val Asn Pro His Gly  
 340 345 350  
 Tyr Val His Glu Thr Leu Thr Val Tyr Lys Ala Cys Asn Leu Asn Leu  
 355 360 365  
 Ile Gly Arg Pro Ser Thr Glu His Ser Trp Phe Pro Gly Tyr Ala Trp  
 370 375 380  
 Thr Val Ala Gln Cys Lys Ile Cys Ala Ser His Ile Gly Trp Lys Phe  
 385 390 395 400  
 Thr Ala Thr Lys Lys Asp Met Ser Pro Gln Lys Phe Trp Gly Leu Thr

405 410 415  
 Arg Ser Ala Leu Leu Pro Thr Ile Pro Asp Thr Glu Asp Glu Ile Ser  
 420 425 430  
 Pro Asp Lys Val Ile Leu Cys Leu  
 435 440

<210> 3629  
 <211> 695  
 <212> DNA  
 <213> Homo sapiens

<400> 3629  
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 180  
 tcactctcgc atctgctggt cctcgggctg tatcttgggc cacagccgga ctcacggcct  
 240  
 gcactgctgc cgcagttggc agcaaacgca gtgctgttcc tgtgcgggaa cgtggcagga  
 300  
 gtgtaccaca aggcgctgat ggagcgcgcc ctgcgggcca cgttccggga ggcactcagc  
 360  
 tccctgcact cagccggcg gctggacacc gagaagaagc accaggtcag ccgggcctag  
 420  
 gaaggtcaga gcagcgtcc gagggaggag ttgcttagat tacataacgg ggctcctcca  
 480  
 caagttgagt gactctgggc aggtttcttg acctgtttct tcttttgtat aaaatgtggg  
 540  
 tattgcccac cttagaaggt tgtgaggctc aaacaaacca aagcttataa aaagcacttt  
 600  
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<210> 3630  
 <211> 139  
 <212> PRT  
 <213> Homo sapiens

<400> 3630  
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 His Ala Phe Leu Phe Thr Gly Gly Val Val Ser Ala Trp Asp Gln Val  
 20 25 30  
 Ser Tyr Phe Leu Phe Val Ile Phe Thr Ala Tyr Ala Met Leu Pro Leu  
 35 40 45  
 Gly Met Arg Asp Ala Ala Val Ala Gly Leu Ala Ser Ser Leu Ser His  
 50 55 60  
 Leu Leu Val Leu Gly Leu Tyr Leu Gly Pro Gln Pro Asp Ser Arg Pro  
 65 70 75 80  
 Ala Leu Leu Pro Gln Leu Ala Ala Asn Ala Val Leu Phe Leu Cys Gly

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<400> 3632
Met Gln Tyr Leu Glu Lys Arg Lys Asn Pro Val Cys His Phe Val Thr
  1             5             10             15
Pro Leu Asp Gly Ser Val Asp Val Asp Glu His Arg Arg Pro Glu Ala

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20 25 30  
 Ile Thr Thr Glu Gly Lys Tyr Trp Lys Ser Arg Ile Glu Ile Val Ile  
 35 40 45  
 Arg Glu Tyr His Lys Trp Arg Thr Tyr Phe Lys Lys Arg Leu Gln Gln  
 50 55 60  
 His Lys Asp Glu Asp Leu Ser Ser Leu Val Gln Asp Asp Asp Met Leu  
 65 70 75 80  
 Tyr Trp His Lys His Gly Asp Gly Trp Lys Thr Pro Val Pro Met Glu  
 85 90 95  
 Glu Asp Pro Leu Leu Asp Thr Asp Met Leu Met Ser Glu Phe Ser Asp  
 100 105 110  
 Thr Leu Phe Ser Thr Leu Ser Ser His Gln Pro Val Ala Trp Pro Asn  
 115 120 125  
 Pro Arg Glu Ile Ala His Leu Gly Asn Ala Asp Met Ile Gln Pro Gly  
 130 135 140  
 Leu Ile Pro Leu Gln Pro Asn Leu Asp Phe Met Asp Thr Phe Glu Pro  
 145 150 155 160  
 Phe Gln Asp Leu Phe Ser Ser Ser Arg Ser Ile Phe Gly Ser Met Leu  
 165 170 175  
 Pro Ala Ser Ala Ser Ala Pro Val Pro Asp Pro Asn Asn Pro Pro Ala  
 180 185 190  
 Gln Glu Ser Ile Leu Pro Thr Thr Ala Leu Pro Thr Val Ser Leu Pro  
 195 200 205  
 Asp Ser Leu Ile Ala Pro Pro Thr Ala Pro Ser Leu Ala Arg  
 210 215 220

&lt;210&gt; 3633

&lt;211&gt; 1570

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3633

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 120  
 aggagagcct gggcaagcat tcttaggttg atgctggggc ccagagtagc agtgagcatc  
 180  
 ctgtgtgaag atggcatttc tcaactgatta ttggaaaagc acaagagcca cgtgctggag  
 240  
 ccattgtcca gccttgccct ggaggagcag tgtctggctt tgtccctaga ttggtccact  
 300  
 gggaaaactg gaagggccgg ggaccagccc ttgaagatca tcagcagtgga ctccacaggg  
 360  
 cagctccacc tcctgatggg gaatgagacg aggccagggc tgcagaaagt ggcctcatgg  
 420  
 caggcacatc aattcgaggc ctggattgct gctttcaatt actggcatcc agaaattgtg  
 480  
 tattcagggg ggcacgatgg ccttctgagg ggctgggaca ccagggtacc cggcaaattt  
 540  
 ctcttcacca gcnaaaagac acaccatnng ggtgtgtgca gcatccagag cagccctcat  
 600  
 cgggagcaca tcctggccac gggaagctat gatgaacaca tcctactgtg ggacacacga  
 660

aacatgaagc agccgttggc agatacgct gtgcaggggtg gggatatggag aatcaagtgg  
 720  
 caccctttcc accaccacct gctcctggcc gcctgcatgc acagtggctt taagatcctc  
 780  
 aactgccaaa aggcaatgga ggagaggcag gaggcgacgg tcctgacatc tcacacattg  
 840  
 cccgactcgc tgggtgatgg agccgactgg tcctgggtgc tcttccttc tctgcagcgg  
 900  
 gccccctcgt ggtcctttcc tagcaaccta ggaaccaaga cggcagacct gaaggggtgca  
 960  
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 1020  
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 1080  
 caggctacag cagccaccac acgtgactgt ggcgtgaacc cagaagaagc agactcagcc  
 1140  
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 1200  
 gggaactgag cttgaaatca tgaagcccct tcccacaagg aaaccaggag ggagactgcg  
 1260  
 agtgagtgcc cgggaccacc tcatcagaga tgcttactgc agccctgcag gtgcctgtgc  
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 1380  
 gctgggcccc tgaaagtgga ctgggtgatt ctgtctggca gagagtgggg aaaagacgcg  
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 1500  
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 1560  
 aaaaaaaaaa  
 1570

&lt;210&gt; 3634

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3634

Met	Val	Asn	Glu	Thr	Arg	Pro	Arg	Leu	Gln	Lys	Val	Ala	Ser	Trp	Gln
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Ala	His	Gln	Phe	Glu	Ala	Trp	Ile	Ala	Ala	Phe	Asn	Tyr	Trp	His	Pro
		20						25					30		
Glu	Ile	Val	Tyr	Ser	Gly	Gly	Asp	Asp	Gly	Leu	Leu	Arg	Gly	Trp	Asp
	35					40						45			
Thr	Arg	Val	Pro	Gly	Lys	Phe	Leu	Phe	Thr	Ser	Xaa	Lys	Thr	His	His
	50					55				60					
Xaa	Gly	Val	Cys	Ser	Ile	Gln	Ser	Ser	Pro	His	Arg	Glu	His	Ile	Leu
65					70				75					80	
Ala	Thr	Gly	Ser	Tyr	Asp	Glu	His	Ile	Leu	Leu	Trp	Asp	Thr	Arg	Asn
			85						90					95	
Met	Lys	Gln	Pro	Leu	Ala	Asp	Thr	Pro	Val	Gln	Gly	Gly	Val	Trp	Arg
		100						105					110		
Ile	Lys	Trp	His	Pro	Phe	His	His	His	Leu	Leu	Leu	Ala	Ala	Cys	Met

115 120 125  
 His Ser Gly Phe Lys Ile Leu Asn Cys Gln Lys Ala Met Glu Glu Arg  
 130 135 140  
 Gln Glu Ala Thr Val Leu Thr Ser His Thr Leu Pro Asp Ser Leu Val  
 145 150 155 160  
 Tyr Gly Ala Asp Trp Ser Trp Leu Leu Phe Arg Ser Leu Gln Arg Ala  
 165 170 175  
 Pro Ser Trp Ser Phe Pro Ser Asn Leu Gly Thr Lys Thr Ala Asp Leu  
 180 185 190  
 Lys Gly Ala Ser Glu Leu Pro Thr Pro Cys His Glu Cys Arg Glu Asp  
 195 200 205  
 Asn Asp Gly Glu Gly His Ala Arg Pro Gln Ser Gly Met Lys Pro Leu  
 210 215 220  
 Thr Glu Gly Met Arg Lys Asn Gly Thr Trp Leu Gln Ala Thr Ala Ala  
 225 230 235 240  
 Thr Thr Arg Asp Cys Gly Val Asn Pro Glu Glu Ala Asp Ser Ala Phe  
 245 250 255  
 Ser Leu Leu Ala Thr Cys Ser Phe Tyr Asp His Ala Leu His Leu Trp  
 260 265 270  
 Glu Trp Glu Gly Asn  
 275

&lt;210&gt; 3635

&lt;211&gt; 835

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3635

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 180  
 cctctggcga tgccctcaagc ttgctctctg gcggcaggtc ccttgccctcc aggggtccatc  
 240  
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 300  
 ttggcagggc tggggcaagg aattctgaca gaaacacaac aagggttaat ggtagccagc  
 360  
 cctgctcaga ccctcaatga cagcgtggat gacatcatgg cagcagtcag tggaagagca  
 420  
 tctgcaatgt caaacactcc taccacagct attgctgcat ccatttccca acctcagact  
 480  
 ccaactccaa gtccctatcat ctctccttca gccatgcttc ctatctaccc tgccattgat  
 540  
 attgatgcac agactgagag taatcatgac acggcgctaa cacttgccctg tgctgggtggc  
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 cagcaggaac tgggtacaaac actgctagag agaggagcta gtatagagca ccgagacaag  
 660  
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 720  
 ttgctggaca atgggtgcaga cattgaagcc cagtctgaaa gaaccaagga cacaccactc  
 780

tccttggtt gttctggggg aagacaggag gtggtggagc tattgttagc tcgag  
835

<210> 3636

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3636

Xaa Ile Gln Leu Gln Gln Gln Gln Gln Ser Cys Gln His Leu Gly  
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Leu Leu Thr Pro Val Gly Val Gly Glu Gln Leu Ser Glu Gly Asp Tyr  
20 25 30  
Ala Arg Leu Gln Gln Val Asp Pro Val Leu Leu Lys Asp Glu Pro Gln  
35 40 45  
Gln Thr Ala Ala Gln Met Gly Cys Ala Pro Ile Gln Pro Leu Ala Met  
50 55 60  
Pro Gln Ala Leu Pro Leu Ala Ala Gly Pro Leu Pro Pro Gly Ser Ile  
65 70 75 80  
Ala Asn Leu Thr Glu Leu Gln Gly Val Ile Val Gly Gln Pro Val Leu  
85 90 95  
Gly Gln Ala Gln Leu Ala Gly Leu Gly Gln Gly Ile Leu Thr Glu Thr  
100 105 110  
Gln Gln Gly Leu Met Val Ala Ser Pro Ala Gln Thr Leu Asn Asp Thr  
115 120 125  
Leu Asp Asp Ile Met Ala Ala Val Ser Gly Arg Ala Ser Ala Met Ser  
130 135 140  
Asn Thr Pro Thr His Ser Ile Ala Ala Ser Ile Ser Gln Pro Gln Thr  
145 150 155 160  
Pro Thr Pro Ser Pro Ile Ile Ser Pro Ser Ala Met Leu Pro Ile Tyr  
165 170 175  
Pro Ala Ile Asp Ile Asp Ala Gln Thr Glu Ser Asn His Asp Thr Ala  
180 185 190  
Leu Thr Leu Ala Cys Ala Gly Gly His Glu Glu Leu Val Gln Thr Leu  
195 200 205  
Leu Glu Arg Gly Ala Ser Ile Glu His Arg Asp Lys Lys Gly Phe Thr  
210 215 220  
Pro Leu Ile Leu Ala Ala Thr Ala Gly His Val Gly Val Val Glu Ile  
225 230 235 240  
Leu Leu Asp Asn Gly Ala Asp Ile Glu Ala Gln Ser Glu Arg Thr Lys  
245 250 255  
Asp Thr Pro Leu Ser Leu Ala Cys Ser Gly Gly Arg Gln Glu Val Val  
260 265 270  
Glu Leu Leu Leu Ala Arg  
275

<210> 3637

<211> 2128

<212> DNA

<213> Homo sapiens

<400> 3637

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60

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120  
cctgccaaacc cctgctcttc caggtcgggc cccggggttc tgcggctgtt agggacagag  
180  
gcaaagaagg gcaggacggt ccggtttccc gtggatgttc ccgcccgaga aagacagcaa  
240  
gttgtgtgtg cgcccgggac ggggagggga aggtagccgc cgcccgccag ccatggacca  
300  
tcattcttag tgcagaggat ggaaagtga tgcccagtaa gactgaagat ccattctgca  
360  
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agtcctgaa cacttacttg gggtcctcat tgccctatct ggtgaaagat ggcattccagc  
480  
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540  
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1680

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&lt;210&gt; 3638

&lt;211&gt; 200

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3638

Met Ala Ser Ser Leu Thr Cys Thr Gly Val Ile Trp Ala Leu Leu Ser  
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 Phe Leu Cys Ala Ala Thr Ser Cys Val Gly Phe Phe Met Pro Tyr Trp  
 20 25 30  
 Leu Trp Gly Ser Gln Leu Gly Lys Pro Val Ser Phe Gly Thr Phe Arg  
 35 40 45  
 Arg Cys Ser Tyr Pro Val His Asp Glu Ser Arg Gln Met Met Val Met  
 50 55 60  
 Val Glu Glu Cys Gly Arg Tyr Ala Ser Phe Gln Gly Ile Pro Ser Ala  
 65 70 75 80  
 Glu Trp Arg Ile Cys Thr Ile Val Thr Gly Leu Gly Cys Gly Leu Leu  
 85 90 95  
 Leu Leu Val Ala Leu Thr Ala Leu Met Gly Cys Cys Val Ser Asp Leu  
 100 105 110  
 Ile Ser Arg Thr Val Gly Arg Val Ala Gly Gly Ile Gln Phe Leu Gly  
 115 120 125  
 Gly Leu Leu Ile Gly Ala Gly Cys Ala Leu Tyr Pro Leu Gly Trp Asp  
 130 135 140  
 Ser Glu Glu Val Arg Gln Thr Cys Gly Tyr Thr Ser Gly Gln Phe Asp  
 145 150 155 160  
 Leu Gly Lys Cys Glu Ile Gly Trp Ala Tyr Tyr Cys Thr Gly Ala Gly  
 165 170 175  
 Ala Thr Ala Ala Met Leu Leu Cys Thr Trp Leu Ala Cys Phe Ser Gly  
 180 185 190  
 Lys Lys Gln Lys His Tyr Pro Tyr  
 195 200

&lt;210&gt; 3639

&lt;211&gt; 726

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3639

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 60  
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 120  
 aagactaaca gtggttatct ctacagcgga ttataaatgt tttggttttt tttttttttt  
 180  
 tgtacatttt agtatttttt gaaatttttt taataagcgt gtattacata cagtaaaaaa  
 240  
 aagcacatta atgtaggcag attatcaatg ttatgcattt cactgattgc atatctcttt  
 300  
 ttttatcaat ggtgaacatt gcaaatgatt gatacgtttt tcttaggaag tggcattgcc  
 360  
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 420  
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 480  
 tccagggcat ttctttcatt atgagtgtga tttttctgaa aggaacgtga tctcgttttc  
 540  
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 600  
 tgtgccttct ccttctctt tctaggtcct gattctcacc tctgcctgtg taataacctt  
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 720  
 taagat  
 726

&lt;210&gt; 3640

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3640

Met	Leu	His	Ala	Ala	Arg	Lys	Arg	Asp	His	Val	Pro	Phe	Arg	Lys	Met
1				5					10					15	
Ser	Leu	Ile	Met	Lys	Glu	Met	Pro	Trp	Arg	Thr	Gln	His	Pro	Asn	Phe
			20					25					30		
Ser	Leu	Leu	Asn	Pro	Leu	Lys	Gly	Glu	Ile	Phe	Leu	Leu	Pro	Ala	Arg
			35				40					45			
Val	Tyr	Gly	Asp	Asp	Thr	Leu	Arg	Pro	Cys	Trp	Cys	Trp	Lys	Asn	His
	50					55					60				
Leu	Trp	Gln	Cys	His	Phe	Leu	Arg	Lys	Thr	Tyr	Gln	Ser	Phe	Ala	Met
65					70				75					80	
Phe	Thr	Ile	Asp	Lys	Lys	Arg	Asp	Met	Gln	Ser	Val	Lys	Cys	Ile	Thr
			85					90						95	
Leu	Ile	Ile	Cys	Leu	His										
			100												

&lt;210&gt; 3641

&lt;211&gt; 455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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 120  
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 180  
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 240  
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 300  
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 360  
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 455

<210> 3642  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 3642  
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 20 25 30  
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 35 40 45  
 Pro Leu Glu Arg Arg Ser Gly Arg Gly Ala Arg Asp Ala Arg Ala Leu  
 50 55 60  
 Thr Ser Trp Ala Pro Val Arg Gly Glu Val Arg Lys Lys Thr Pro Ser  
 65 70 75 80  
 Glu Val Thr Val Pro Thr Arg Val Asp Ser Pro Arg Pro Asp His Ala  
 85 90 95  
 Arg Arg Trp Pro Lys Gly Arg Gly Trp Gly Arg Gly Cys Ser Ala Pro  
 100 105 110  
 Ser Ser Arg Ala Ala Ser Leu Gln Val Phe Ala Leu Ala Arg Arg Ser  
 115 120 125  
 Pro Arg Glu Gln Phe Gly Thr Val Arg Ile Gly Phe Arg Glu Pro Ala  
 130 135 140  
 Phe Lys Thr Arg  
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<210> 3643  
 <211> 2243  
 <212> DNA  
 <213> Homo sapiens

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120  
ctttgcaagc aggtggccag taaagctgag gagaatctgc tcatgggtgct ggggacagac  
180  
atgagtgatc ggagagctgc agtcatcttt gcagatacac ttactcttct gtttgaaggg  
240  
attgcccgc tttgtggagac ccaccagcca atagtggaga cctattatgg gccagggaga  
300  
ctctataccc tgatcaaata tctgcagggtg gaatgtgaca gacaggtgga gaaggtggtg  
360  
gacaagttca tcaagcaaag ggactaccac cagcagttcc ggcaggttca gaacaacctg  
420  
atgagaaatt ctacaacaga aaaaatcgaa ccaagagaac tggaccat cctgactgag  
480  
gtcaccctga tgaatgcccg cagtgcagta tacttacgtc toctcaagaa gaggattagc  
540  
tctgattttg aggtgggaga ctccatggcc tcagaggaag taaagcaaga gcaccagaag  
600  
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660  
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720  
gacacctatg agaaggcca gctgacatcc agcatgggtg atgatgtctt ctacattgtt  
780  
aagaagtga tttggcgggc tctgtccagc tccagcattg actgtctctg tgccatgatc  
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aacctcgcca ccacagagct ggagtctgac ttcagggatg ttctgtgtaa taagctgcgg  
900  
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960  
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1020  
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1140  
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1260  
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1380  
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1560  
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1620  
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1680

cgctcacc ctgctgaagt gcgccaggtg ctggccctgc ggatagactt ccgcagtga  
 1740  
 gatatcaaga ggctgcgcct gtagctgcct ggatgagcac acctgggtca tcacacttgc  
 1800  
 aggctgttc cctaaggggc cccagccaag gagctgagcg aggctgtctg gcttggggga  
 1860  
 gatctgacag cccagacctt tctacggctg gcagcagaga aacaaagtct ggacccactc  
 1920  
 catgctctgc cctcagacct ggccaggtga tgctctgggg gcagcatctc cccaccgaga  
 1980  
 gaagcgggct cctaataagg tgggaaagcc acggcaggca gcgagcagcc caggccagct  
 2040  
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 2100  
 agtcctagac aacttgggta catctgggga cctagcagtt aggcttgact ttgaggagag  
 2160  
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 2220  
 aaaaaaaaaa aaaaaaaaaa aaa  
 2243

&lt;210&gt; 3644

&lt;211&gt; 560

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3644

Gly	Leu	His	Glu	Glu	Gly	Leu	Arg	Lys	Phe	Ser	Glu	Tyr	Leu	Cys	Lys
1			5					10						15	
Gln	Val	Ala	Ser	Lys	Ala	Glu	Glu	Asn	Leu	Leu	Met	Val	Leu	Gly	Thr
			20					25					30		
Asp	Met	Ser	Asp	Arg	Arg	Ala	Ala	Val	Ile	Phe	Ala	Asp	Thr	Leu	Thr
		35				40					45				
Leu	Leu	Phe	Glu	Gly	Ile	Ala	Arg	Ile	Val	Glu	Thr	His	Gln	Pro	Ile
	50				55					60					
Val	Glu	Thr	Tyr	Tyr	Gly	Pro	Gly	Arg	Leu	Tyr	Thr	Leu	Ile	Lys	Tyr
65				70				75					80		
Leu	Gln	Val	Glu	Cys	Asp	Arg	Gln	Val	Glu	Lys	Val	Val	Asp	Lys	Phe
			85					90					95		
Ile	Lys	Gln	Arg	Asp	Tyr	His	Gln	Gln	Phe	Arg	His	Val	Gln	Asn	Asn
		100					105						110		
Leu	Met	Arg	Asn	Ser	Thr	Thr	Glu	Lys	Ile	Glu	Pro	Arg	Glu	Leu	Asp
	115					120				125					
Pro	Ile	Leu	Thr	Glu	Val	Thr	Leu	Met	Asn	Ala	Arg	Ser	Glu	Leu	Tyr
	130				135					140					
Leu	Arg	Phe	Leu	Lys	Lys	Arg	Ile	Ser	Ser	Asp	Phe	Glu	Val	Gly	Asp
145				150				155						160	
Ser	Met	Ala	Ser	Glu	Glu	Val	Lys	Gln	Glu	His	Gln	Lys	Cys	Leu	Asp
			165					170					175		
Lys	Leu	Leu	Asn	Cys	Leu	Leu	Ser	Cys	Thr	Met	Gln	Glu	Leu	Ile	
	180					185					190				
Gly	Leu	Tyr	Val	Thr	Met	Glu	Glu	Tyr	Phe	Met	Arg	Glu	Thr	Val	Asn
	195				200						205				
Lys	Ala	Val	Ala	Leu	Asp	Thr	Tyr	Glu	Lys	Gly	Gln	Leu	Thr	Ser	Ser

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      210              215              220
Met Val Asp Asp Val Phe Tyr Ile Val Lys Lys Cys Ile Gly Arg Ala
225              230              235              240
Leu Ser Ser Ser Ser Ile Asp Cys Leu Cys Ala Met Ile Asn Leu Ala
      245              250              255
Thr Thr Glu Leu Glu Ser Asp Phe Arg Asp Val Leu Cys Asn Lys Leu
      260              265              270
Arg Met Gly Phe Pro Ala Thr Thr Phe Gln Asp Ile Gln Arg Gly Val
      275              280              285
Thr Ser Ala Val Asn Ile Met His Ser Ser Leu Gln Gln Gly Lys Phe
      290              295              300
Asp Thr Lys Gly Ile Glu Ser Thr Asp Glu Ala Lys Met Ser Phe Leu
305              310              315              320
Val Thr Leu Asn Asn Val Glu Val Cys Ser Glu Asn Ile Ser Thr Leu
      325              330              335
Lys Lys Thr Leu Glu Ser Asp Cys Thr Lys Leu Phe Ser Gln Gly Ile
      340              345              350
Gly Gly Glu Gln Ala Gln Ala Lys Phe Asp Ser Cys Leu Ser Asp Leu
      355              360              365
Ala Ala Val Ser Asn Lys Phe Arg Asp Leu Leu Gln Glu Gly Leu Thr
      370              375              380
Glu Leu Asn Ser Thr Ala Ile Lys Pro Gln Val Gln Pro Trp Ile Asn
385              390              395              400
Ser Phe Phe Ser Val Ser His Asn Ile Glu Glu Glu Phe Asn Asp
      405              410              415
Tyr Glu Ala Asn Asp Pro Trp Val Gln Gln Phe Ile Leu Asn Leu Glu
      420              425              430
Gln Gln Met Ala Glu Phe Lys Ala Ser Leu Ser Pro Val Ile Tyr Asp
      435              440              445
Ser Leu Thr Gly Leu Met Thr Ser Leu Val Ala Val Glu Leu Glu Lys
      450              455              460
Val Val Leu Lys Ser Thr Phe Asn Arg Leu Gly Gly Leu Gln Phe Asp
465              470              475              480
Lys Glu Leu Arg Ser Leu Ile Ala Tyr Leu Thr Thr Val Thr Thr Trp
      485              490              495
Thr Ile Arg Asp Lys Phe Ala Arg Leu Ser Gln Met Ala Thr Ile Leu
      500              505              510
Asn Leu Glu Arg Val Thr Glu Ile Leu Asp Tyr Trp Gly Pro Asn Ser
      515              520              525
Gly Pro Leu Thr Trp Arg Leu Thr Pro Ala Glu Val Arg Gln Val Leu
      530              535              540
Ala Leu Arg Ile Asp Phe Arg Ser Glu Asp Ile Lys Arg Leu Arg Leu
545              550              555              560

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&lt;210&gt; 3645

&lt;211&gt; 823

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3645

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60

ccagggtttt gtagatggat tcctcaaaaa ctcttttgag gtattgcctg ggcttctcag

120

tcgggttgat ttctcatct tctatttgat gggctaactg ctctatggaa ggaagatctt  
 180  
 cctcctcctt ggaggctaag atttggcgta actctttcct gagatcaata aaacgatcgt  
 240  
 ggaacagggc caggcaccac ggctcgtga agtagctata gagatctgtg atcaggtttt  
 300  
 catcgtaccg agcacacagg ttgttgagga gttgctcgtg ctggccaaac aagcggatgt  
 360  
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 420  
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 480  
 cataattagg ctgggccatt tgtacctcca agggagtgg aatggcaggc ttggcaatat  
 540  
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 600  
 ggatgagccg gtcaagatta gctggtggct cggcacagg ctcaagggtt ggatcaaaga  
 660  
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 720  
 gccattcat ttgagtagta tctattggag aatttggtga gggagccagc agctctgatg  
 780  
 gctatgtcgt tgggtgtggaa gttggtatca atcacaagtc gac  
 823

&lt;210&gt; 3646

&lt;211&gt; 243

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3646

Met	Asn	Gly	Pro	Thr	Ser	Asn	Phe	Ser	Ser	Lys	Glu	Ile	Gly	Phe	Gln
1				5				10						15	
Leu	Ala	Ala	Ala	Met	Leu	His	Leu	Phe	Asp	Pro	Thr	Leu	Glu	Pro	Val
		20						25					30		
Thr	Glu	Pro	Pro	Ala	Asn	Leu	Asp	Arg	Leu	Ile	Pro	Met	Tyr	Lys	Gly
		35					40					45			
Ala	Lys	Ile	Gln	Gly	Gly	Ile	Leu	Pro	Gly	Ser	Tyr	His	Tyr	Leu	His
	50					55					60				
Ile	Ala	Lys	Pro	Ala	Ile	Pro	Thr	Pro	Leu	Glu	Val	Gln	Met	Ala	Gln
65					70				75					80	
Pro	Asn	Tyr	Gly	Leu	Glu	Leu	Val	Thr	Gly	Ser	Ala	Lys	Asn	Gly	Thr
			85					90					95		
Tyr	Phe	Arg	Ile	His	Ile	Asn	Lys	Tyr	Lys	Met	Val	Glu	Thr	Ile	Thr
		100					105					110			
Cys	Leu	Ser	Arg	Glu	Pro	Phe	Pro	Ala	Ser	Asn	Tyr	Ile	Arg	Leu	Phe
		115					120					125			
Gly	Gln	His	Glu	Gln	Leu	Leu	Asn	Asn	Leu	Cys	Ala	Arg	Tyr	Asp	Glu
	130					135				140					
Asn	Leu	Ile	Thr	Asp	Leu	Tyr	Ser	Tyr	Phe	Thr	Glu	Pro	Trp	Cys	Leu
145				150					155					160	
Ala	Leu	Phe	His	Asp	Arg	Phe	Ile	Asp	Leu	Arg	Lys	Glu	Leu	Arg	Gln
			165					170					175		
Ile	Leu	Ala	Ser	Lys	Glu	Glu	Glu	Asp	Leu	Pro	Ser	Ile	Glu	Gln	Leu

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                180                185                190
Ala His Gln Ile Glu Asp Glu Glu Ile Asn Pro Thr Glu Lys Pro Arg
                195                200                205
Gln Tyr Leu Lys Arg Val Phe Glu Glu Ser Ile Tyr Lys Thr Leu Val
                210                215                220
Glu Arg Ser Thr Leu Asp Tyr Leu His Tyr Asn Arg Tyr His Leu Pro
225                230                235                240
Met Tyr Ala

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<210> 3647  
 <211> 584  
 <212> DNA  
 <213> Homo sapiens

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<400> 3647
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120
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240
acggctccag ccacagcggc gccccaggcc caggtgaagg aggcctcctt gggacccggg
300
aaggcgggag cccacccac cgggggttgc tctgcgccg ctgtcccttg cccgagggcc
360
gcggatccca gcgggnnggc cgtggcccgg gtcggggcgc aggtcttctt ggtacctgac
420
gccgtccga ccccggttc cccgcagacc ccacactggc gcgcggccac aacgtcatca
480
atgtcatcgt ccccgagagc cgagccact tcttccagca gctgggctac gtgctggcca
540
cgctgtgtct cttcatcctg ctactggtca ctgtcctcct ggcc
584

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<210> 3648  
 <211> 63  
 <212> PRT  
 <213> Homo sapiens

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20        25        30
Val Ser Ser Arg Trp Arg Ser Pro Thr Arg Ala Pro Thr Pro Ala Thr
35        40        45
Cys Thr Thr Ile Thr Val Ala Cys Thr Asn Ala Ala Ser Ser Thr
50        55        60

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<210> 3649  
 <211> 648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3649

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 60  
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 120  
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&lt;210&gt; 3650

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3650

Met	Ile	Leu	Lys	Ala	Cys	His	Ser	Cys	Phe	His	Phe	His	Thr	Asp	Lys
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			20					25					30		
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			35				40					45			
Ala	Ile	Arg	Asn	Val	Gln	Asp	Ile	Ile	Thr	Arg	Asn	Gln	Lys	Ala	Gly
			50			55					60				
Val	Phe	Lys	Thr	Gln	Lys	Ile	Ser	Ser	Cys	Val	Leu	Arg	Trp	Asp	Asn
65				70					75					80	
Glu	Thr	Asp	Val	Ser	Gln	Leu	Glu	Gly	His	Phe	Asp	Ile	Val	Met	Cys
			85					90					95		
Ala	Asp	Cys	Leu	Phe	Leu	Asp	Gln	Tyr	Arg	Ala	Ser	Leu	Val	Asp	Ala
			100					105					110		
Ile	Lys	Arg	Leu	Leu	Gln	Pro	Arg	Gly	Lys	Ala	Met	Val	Phe	Ala	Pro
			115				120					125			
Arg	Arg	Gly	Asn	Thr	Leu	Asn	Gln	Phe	Cys	Asn	Leu	Ala	Glu	Lys	Ala
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Phe	His	Ser	Lys	Leu	Lys	Lys	Glu	Asn	Pro	Asp	Ile	Tyr	Glu	Glu	Asn

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 <212> DNA  
 <213> Homo sapiens

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 480  
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&lt;210&gt; 3652

&lt;211&gt; 384

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3652

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			20					25					30		
Gly	Ile	Asp	Tyr	Asn	Ser	Trp	Glu	Val	Gly	Pro	Lys	Phe	Arg	Gly	Val
			35					40					45		
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<210> 3653
<211> 283
<212> DNA
<213> Homo sapiens
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 240  
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<210> 3654

<211> 88

<212> PRT

<213> Homo sapiens

<400> 3654

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Ile	Pro	Ile	Arg	Ala	Ser	Phe	Ala	Ala	Ala	Glu	Met	Glu	Arg	Cys	His
			20				25						30		
Gln	Ala	Val	Phe	Ser	Thr	Gly	Asp	Ala	Pro	Ser	Ala	Gln	Gln	Asp	Ala
		35				40					45				
Ser	Ser	Glu	Leu	Arg	Leu	His	Ile	Phe	Ala	Asp	Trp	Glu	Glu	Gly	Arg
	50				55					60					
Arg	Arg	Gly	Arg	Ile	Val	Ser	Gly	Ala	Ala	Phe	Trp	Gly	Cys	Leu	Pro
65				70				75						80	
Val	Gly	Ile	Phe	Ser	Thr	Pro	Arg								
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<210> 3655

<211> 3477

<212> DNA

<213> Homo sapiens

<400> 3655

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&lt;210&gt; 3656

&lt;211&gt; 429

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3656

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			20					25				30			
Lys	Ala	Gly	Thr	Gly	Ser	Met	Arg	Ser	Gly	Phe	Pro	Ala	Lys	Ser	Ala
		35					40					45			
Met	Trp	Arg	Tyr	Arg	Gly	Thr	Pro	Phe	Ser	Lys	Ala	Val	Glu	His	Ile
	50					55					60				
Asn	Lys	Thr	Ile	Ala	Pro	Ala	Leu	Val	Ser	Lys	Lys	Leu	Asn	Val	Thr

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			85						90					95	
Asn	Lys	Ser	Lys	Phe	Gly	Ala	Asn	Ala	Ile	Leu	Gly	Val	Ser	Leu	Ala
			100					105						110	
Val	Cys	Lys	Ala	Gly	Ala	Val	Glu	Lys	Gly	Val	Pro	Leu	Tyr	Arg	His
		115					120					125			
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			165					170						175	
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Lys	Arg	Ile	Ala	Gln	Ala	Val	Asn	Glu	Lys	Ser	Cys	Asn	Cys	Leu	Leu
			325						330					335	
Leu	Lys	Val	Asn	Gln	Ile	Gly	Ser	Val	Thr	Glu	Ser	Leu	Gln	Ala	Cys
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Thr	Gly	Gln	Ile	Lys	Thr	Gly	Ala	Pro	Cys	Arg	Ser	Glu	Arg	Leu	Ala
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Lys	Tyr	Asn	Gln	Leu	Leu	Arg	Ile	Glu	Glu	Glu	Leu	Gly	Ser	Lys	Ala
			405					410						415	
Lys	Phe	Ala	Gly	Arg	Asn	Phe	Arg	Asn	Pro	Leu	Ala	Lys			
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&lt;210&gt; 3657

&lt;211&gt; 337

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3657

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<210> 3658

<211> 99

<212> PRT

<213> Homo sapiens

<400> 3658

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Leu	Arg	Val	His	Phe	Arg	Leu	Lys	Ala	Tyr	Thr	Cys	Arg	Cys	Val	Thr
			20					25					30		
Cys	Ser	Phe	Ser	Ala	Gln	Gly	Val	His	Val	Gln	Val	Cys	Tyr	Val	Phe
		35				40					45				
Ile	Phe	Gly	Ser	Arg	Leu	Thr	Arg	Ala	Gly	Val	Pro	His	Val	His	Phe
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Arg	Leu	Lys	Ala	Tyr	Met	Cys	Arg	Cys	Val	Thr	Cys	Ser	Leu	Ser	Ala
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Arg Thr Arg

<210> 3659

<211> 1025

<212> DNA

<213> Homo sapiens

<400> 3659

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&lt;211&gt; 341

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3660

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&lt;211&gt; 1117

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3661

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&lt;211&gt; 6633

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3665

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Val	Ile	Gly	Arg	Gly	Ala	Phe	Gly	Glu	Val	Ala	Val	Val	Lys	Met	Lys
			85					90						95	
Asn	Thr	Glu	Arg	Ile	Tyr	Ala	Met	Lys	Ile	Leu	Asn	Lys	Trp	Glu	Met
		100						105					110		
Leu	Lys	Arg	Ala	Glu	Thr	Ala	Cys	Phe	Arg	Glu	Glu	Arg	Asp	Val	Leu
		115					120					125			
Val	Asn	Gly	Asp	Cys	Gln	Trp	Ile	Thr	Ala	Leu	His	Tyr	Ala	Phe	Gln
		130					135					140			
Asp	Glu	Asn	His	Leu	Tyr	Leu	Val	Met	Asp	Tyr	Tyr	Val	Gly	Gly	Asp
145					150					155					160
Leu	Leu	Thr	Leu	Leu	Ser	Lys	Phe	Glu	Asp	Lys	Leu	Pro	Glu	Asp	Met
			165						170					175	
Ala	Arg	Phe	Tyr	Ile	Gly	Glu	Met	Val	Leu	Ala	Ile	Asp	Ser	Ile	His
		180						185					190		
Gln	Leu	His	Tyr	Val	His	Arg	Asp	Ile	Lys	Pro	Asp	Asn	Val	Leu	Leu
		195					200					205			
Asp	Val	Asn	Gly	His	Ile	Arg	Leu	Ala	Asp	Phe	Gly	Ser	Cys	Leu	Lys
	210					215					220				
Met	Asn	Asp	Asp	Gly	Thr	Val	Gln	Ser	Ser	Val	Ala	Val	Gly	Thr	Pro

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225                230                235                240
Asp Tyr Ile Ser Pro Glu Ile Leu Gln Ala Met Glu Asp Gly Met Gly
                245                250                255
Lys Tyr Gly Pro Glu Cys Asp Trp Trp Ser Leu Gly Val Cys Met Tyr
                260                265                270
Glu Met Leu Tyr Gly Glu Thr Pro Phe Tyr Ala Glu Ser Leu Val Glu
                275                280                285
Thr Tyr Gly Lys Ile Met Asn His Glu Glu Arg Phe Gln Phe Pro Ser
                290                295                300
His Val Thr Asp Val Ser Glu Glu Ala Lys Asp Leu Ile Gln Arg Leu
305                310                315                320
Ile Cys Ser Arg Glu Arg Arg Leu Gly Gln Asn Gly Ile Glu Asp Phe
                325                330                335
Lys Lys His Ala Phe Phe Glu Gly Leu Asn Trp Glu Asn Ile Arg Asn
                340                345                350
Leu Glu Ala Pro Tyr Ile Pro Asp Val Ser Ser Pro Ser Asp Thr Ser
                355                360                365
Asn Phe Asp Val Asp Asp Asp Val Leu Arg Asn Thr Glu Ile Leu Pro
370                375                380
Pro Gly Ser His Thr Gly Phe Ser Gly Leu His Leu Pro Phe Ile Gly
385                390                395                400
Phe Thr Phe Thr Thr Glu Ser Cys Phe Ser Asp Arg Gly Ser Leu Lys
                405                410                415
Ser Ile Met Gln Ser Asn Thr Leu Thr Lys Asp Glu Asp Val Gln Arg
                420                425                430
Asp Leu Glu His Ser Leu Gln Met Glu Ala Tyr Glu Arg Arg Ile Arg
                435                440                445
Arg Leu Glu Gln Glu Lys Leu Glu Leu Ser Arg Lys Leu Gln Glu Ser
450                455                460
Thr Gln Thr Val Gln Ser Leu His Gly Ser Ser Arg Ala Leu Ser Asn
465                470                475                480
Ser Asn Arg Asp Lys Glu Ile Lys Lys Leu Asn Glu Glu Ile Glu Arg
                485                490                495
Leu Lys Asn Lys Ile Ala Asp Ser Asn Arg Leu Glu Arg Gln Leu Glu
                500                505                510
Asp Thr Val Ala Leu Arg Gln Glu Arg Glu Asp Ser Thr Gln Arg Leu
                515                520                525
Arg Gly Leu Glu Lys Gln His Arg Val Val Arg Gln Glu Lys Glu Glu
530                535                540
Leu His Lys Gln Leu Val Glu Ala Ser Glu Arg Leu Lys Ser Gln Ala
545                550                555                560
Lys Glu Leu Lys Asp Ala His Gln Gln Arg Lys Leu Ala Leu Gln Glu
                565                570                575
Phe Ser Glu Leu Asn Glu Arg Met Ala Glu Leu Arg Ala Gln Lys Gln
                580                585                590
Lys Val Ser Arg Gln Leu Arg Asp Lys Glu Glu Glu Met Glu Val Ala
                595                600                605
Thr Gln Lys Val Asp Ala Met Arg Gln Glu Met Arg Arg Ala Glu Lys
610                615                620
Leu Arg Lys Glu Leu Glu Ala Gln Leu Asp Asp Ala Val Ala Glu Ala
625                630                635                640
Ser Lys Glu Arg Lys Leu Arg Glu His Ser Glu Asn Phe Cys Lys Gln
                645                650                655
Met Glu Ser Glu Leu Glu Ala Leu Lys Val Lys Gln Gly Gly Arg Gly

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2821

1090	1095	1100
Val Asp Val Gln Arg Gly Ile Gly Thr Ala Tyr Lys Gly His Val Lys		
1105	1110	1115
Val Pro Lys Pro Thr Gly Val Lys Lys Gly Trp Gln Arg Ala Tyr Ala		1120
	1125	1130
Val Val Cys Asp Cys Lys Leu Phe Leu Tyr Asp Leu Pro Glu Gly Lys		1135
	1140	1145
Ser Thr Gln Pro Gly Val Ile Ala Ser Gln Val Leu Asp Leu Arg Asp		1150
	1155	1160
Asp Glu Phe Ser Val Ser Ser Val Leu Ala Ser Asp Val Ile His Ala		1165
	1170	1175
Thr Arg Arg Asp Ile Pro Cys Ile Phe Arg Val Thr Ala Ser Leu Leu		1180
1185	1190	1195
Gly Ala Pro Ser Lys Thr Ser Ser Leu Leu Ile Leu Thr Glu Asn Glu		1200
	1205	1210
Asn Glu Lys Arg Lys Trp Val Gly Ile Leu Glu Gly Leu Gln Ser Ile		1215
	1220	1225
Leu His Lys Asn Arg Leu Arg Asn Gln Val Val His Val Pro Leu Glu		1230
	1235	1240
Ala Tyr Asp Ser Ser Leu Pro Leu Ile Lys Ala Ile Leu Thr Ala Ala		1245
	1250	1255
Ile Val Asp Ala Asp Arg Ile Ala Val Gly Leu Glu Glu Gly Leu Tyr		1260
1265	1270	1275
Val Ile Glu Val Thr Arg Asp Val Ile Val Arg Ala Ala Asp Cys Lys		1280
	1285	1290
Lys Val His Gln Ile Glu Leu Ala Pro Arg Glu Lys Ile Val Ile Leu		1295
	1300	1305
Leu Cys Gly Arg Asn His His Val His Leu Tyr Pro Trp Ser Ser Leu		1310
	1315	1320
Asp Gly Ala Glu Gly Ser Phe Asp Ile Lys Leu Pro Glu Thr Lys Gly		1325
	1330	1335
Cys Gln Leu Met Ala Thr Ala Thr Leu Lys Arg Asn Ser Gly Thr Cys		1340
1345	1350	1355
Leu Phe Val Ala Val Lys Arg Leu Ile Leu Cys Tyr Glu Ile Gln Arg		1360
	1365	1370
Thr Lys Pro Phe His Arg Lys Phe Asn Glu Ile Val Ala Pro Gly Ser		1375
	1380	1385
Val Gln Cys Leu Ala Val Leu Arg Asp Arg Leu Cys Val Gly Tyr Pro		1390
	1395	1400
Ser Gly Phe Cys Leu Leu Ser Ile Gln Gly Asp Gly Gln Pro Leu Asn		1405
	1410	1415
Leu Val Asn Pro Asn Asp Pro Ser Leu Ala Phe Leu Ser Gln Gln Ser		1420
1425	1430	1435
Phe Asp Ala Leu Cys Ala Val Glu Leu Glu Ser Glu Glu Tyr Leu Leu		1440
	1445	1450
Cys Phe Ser His Met Gly Leu Tyr Val Asp Pro Gln Gly Arg Arg Ala		1455
	1460	1465
Arg Ala Gln Glu Leu Met Trp Pro Ala Ala Pro Val Ala Cys Ser Cys		1470
	1475	1480
Ser Pro Thr His Val Thr Val Tyr Ser Glu Tyr Gly Val Asp Val Phe		1485
	1490	1495
Asp Val Arg Thr Met Glu Trp Val Gln Thr Ile Gly Leu Arg Arg Ile		1500
1505	1510	1515
Arg Pro Leu Asn Ser Glu Gly Thr Leu Asn Leu Leu Asn Cys Glu Pro		1520

1525 1530 1535  
 Pro Arg Leu Ile Tyr Phe Lys Ser Lys Phe Ser Gly Ala Val Leu Asn  
 1540 1545 1550  
 Val Pro Asp Thr Ser Asp Asn Ser Lys Lys Gln Met Leu Arg Thr Arg  
 1555 1560 1565  
 Ser Lys Arg Arg Phe Val Phe Lys Val Pro Glu Glu Glu Arg Leu Gln  
 1570 1575 1580  
 Gln Arg Arg Glu Met Leu Arg Asp Pro Glu Leu Arg Ser Lys Met Ile  
 1585 1590 1595 1600  
 Ser Asn Pro Thr Asn Phe Asn His Val Ala His Met Gly Pro Gly Asp  
 1605 1610 1615  
 Gly Met Gln Val Leu Met Asp Leu Pro Leu Ser Ala Val Pro Pro Ser  
 1620 1625 1630  
 Gln Glu Glu Arg Pro Gly Pro Ala Pro Thr Asn Leu Ala Arg Gln Pro  
 1635 1640 1645  
 Pro Ser Arg Asn Lys Pro Tyr Ile Ser Trp Pro Ser Ser Gly Gly Ser  
 1650 1655 1660  
 Glu Pro Ser Val Thr Val Pro Leu Arg Ser Met Ser Asp Pro Asp Gln  
 1665 1670 1675 1680  
 Asp Phe Asp Lys Glu Pro Asp Ser Asp Ser Thr Lys His Ser Thr Pro  
 1685 1690 1695  
 Ser Asn Ser Ser Asn Pro Ser Gly Pro Pro Ser Pro Asn Ser Pro His  
 1700 1705 1710  
 Arg Ser Gln Leu Pro Leu Glu Gly Leu Glu Gln Pro Ala Cys Asp Thr  
 1715 1720 1725

&lt;210&gt; 3667

&lt;211&gt; 505

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3667

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 60  
 taattcccta tgtaacaag ttttaataagt catctgtaac agtacaatta agtccatata  
 120  
 tgattgtatt tactctttct tccctactca tagtatgcgt tccattttga ggaatcacag  
 180  
 atatcgaaga gatgccagaa cactagaaga tgaagaagag atgtgggtta acacagatga  
 240  
 agatgacatg gaagatggag aagctgtagt gtctccatct gacaaaacta aaaatgatga  
 300  
 tgatattatg gatccaataa gttaaattcat ggaaaggaag aaattaaaag aaagtgagga  
 360  
 aaaggaagtg cttctgaaaa caaacctttc tggacggcag agcccaagtt tcaagctttc  
 420  
 cctgtccagt ggaacgaaga ctaacctcac cagccagtca tctacaacaa atctgcctgg  
 480  
 ttctccggga tcacctggat cccca  
 505

&lt;210&gt; 3668

&lt;211&gt; 117

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3668

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Met Arg Ser Ile Leu Arg Asn His Arg Tyr Arg Arg Asp Ala Arg Thr
 1           5           10           15
Leu Glu Asp Glu Glu Glu Met Trp Phe Asn Thr Asp Glu Asp Asp Met
      20           25           30
Glu Asp Gly Glu Ala Val Val Ser Pro Ser Asp Lys Thr Lys Asn Asp
      35           40           45
Asp Asp Ile Met Asp Pro Ile Ser Lys Phe Met Glu Arg Lys Lys Leu
      50           55           60
Lys Glu Ser Glu Glu Lys Glu Val Leu Leu Lys Thr Asn Leu Ser Gly
      65           70           75           80
Arg Gln Ser Pro Ser Phe Lys Leu Ser Leu Ser Ser Gly Thr Lys Thr
      85           90           95
Asn Leu Thr Ser Gln Ser Ser Thr Thr Asn Leu Pro Gly Ser Pro Gly
      100          105          110
Ser Pro Gly Ser Pro
      115

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&lt;210&gt; 3669

&lt;211&gt; 1226

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3669

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gctgagggttc tggcccgac ggactggaca gtagaggatg gattacagaa atacgagaga
120
ggattaatct tttacattaa tcattcactt tatgaaaacc tggatgaaga attaatgaa
180
gaattagcag caaaagtggg tcagatgttt tatgtggctg agccaaagca agtgcccat
240
attctctgta gtccttctat gaagaatatt aatcctttaa ctgcatgag ctatctaagg
300
aagatggata cttctgggtt ttcattccatc ttagtgacac tgagcaaggc agcagtggca
360
ctgaaaatgg gagatcttga cgtgtacaga aatgaaatga aaagccatcc agagatgaag
420
ttggtgtgtg gcttcatttt ggaaccacgc ctgttgattc aacacaggaa gggacagatt
480
gttccaactg agcttgcgac tcacttgaag gagactcagc caggattgct tgtggcttca
540
gtcctgggat tgcagaagaa cagcaaaatt gggattgaag aagcagattc tttctttaag
600
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660
cagctagtgg catgtctccc agatgtggta cttcaggaac tctttttcaa actcacatca
720
cagtacatct ggagattgtc taagaggcag cctcctgaca ccacaccatt gcgaacatcg
780
gaggatctga taaatgcctg tagtcattat ggcttaattt atccatgggt tcacgtcgta
840

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atatcatctg attcttttagc tgataaaaat tatacagaag atctttcaaa attacagtct  
 900  
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 960  
 gaagacacta ttgccggcct cagtgtccat gttctgtgtc gtacacgctt gaaagagtat  
 1020  
 gaacagtgca tagacatact gttagagaga tgcccggagg cagtcattcc atagtcta  
 1080  
 catgaactga aagaagagaa ccggactctg tgggtggaaaa aactgttgcc tgaactttgt  
 1140  
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 1226

<210> 3670

<211> 385

<212> PRT

<213> Homo sapiens

<400> 3670

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Val	Glu	Asp	Gly	Leu	Gln	Lys	Tyr	Glu	Arg	Gly	Leu	Ile	Phe	Tyr	Ile
		20						25				30			
Asn	His	Ser	Leu	Tyr	Glu	Asn	Leu	Asp	Glu	Glu	Leu	Asn	Glu	Glu	Leu
		35				40						45			
Ala	Ala	Lys	Val	Val	Gln	Met	Phe	Tyr	Val	Ala	Glu	Pro	Lys	Gln	Val
	50					55					60				
Pro	His	Ile	Leu	Cys	Ser	Pro	Ser	Met	Lys	Asn	Ile	Asn	Pro	Leu	Thr
65					70					75				80	
Ala	Met	Ser	Tyr	Leu	Arg	Lys	Met	Asp	Thr	Ser	Gly	Phe	Ser	Ser	Ile
			85					90					95		
Leu	Val	Thr	Leu	Ser	Lys	Ala	Ala	Val	Ala	Leu	Lys	Met	Gly	Asp	Leu
			100					105					110		
Asp	Val	Tyr	Arg	Asn	Glu	Met	Lys	Ser	His	Pro	Glu	Met	Lys	Leu	Val
		115					120					125			
Cys	Gly	Phe	Ile	Leu	Glu	Pro	Arg	Leu	Leu	Ile	Gln	His	Arg	Lys	Gly
	130					135					140				
Gln	Ile	Val	Pro	Thr	Glu	Leu	Ala	Thr	His	Leu	Lys	Glu	Thr	Gln	Pro
145					150					155				160	
Gly	Leu	Leu	Val	Ala	Ser	Val	Leu	Gly	Leu	Gln	Lys	Asn	Ser	Lys	Ile
			165					170					175		
Gly	Ile	Glu	Glu	Ala	Asp	Ser	Phe	Phe	Lys	Val	Leu	Cys	Gly	Lys	Asp
		180					185					190			
Glu	Asp	Thr	Ile	Pro	Gln	Leu	Leu	Ile	Asp	Phe	Trp	Glu	Ala	Gln	Leu
	195					200					205				
Val	Ala	Cys	Leu	Pro	Asp	Val	Val	Leu	Gln	Glu	Leu	Phe	Phe	Lys	Leu
	210					215					220				
Thr	Ser	Gln	Tyr	Ile	Trp	Arg	Leu	Ser	Lys	Arg	Gln	Pro	Pro	Asp	Thr
225					230					235				240	
Thr	Pro	Leu	Arg	Thr	Ser	Glu	Asp	Leu	Ile	Asn	Ala	Cys	Ser	His	Tyr
			245					250					255		
Gly	Leu	Ile	Tyr	Pro	Trp	Val	His	Val	Val	Ile	Ser	Ser	Asp	Ser	Leu

	260		265		270										
Ala	Asp	Lys	Asn	Tyr	Thr	Glu	Asp	Leu	Ser	Lys	Leu	Gln	Ser	Leu	Ile
	275		280		285										
Cys	Gly	Pro	Ser	Phe	Asp	Ile	Ala	Ser	Ile	Ile	Pro	Phe	Leu	Glu	Pro
	290		295		300										
Leu	Ser	Glu	Asp	Thr	Ile	Ala	Gly	Leu	Ser	Val	His	Val	Leu	Cys	Arg
305			310		315									320	
Thr	Arg	Leu	Lys	Glu	Tyr	Glu	Gln	Cys	Ile	Asp	Ile	Leu	Leu	Glu	Arg
			325		330									335	
Cys	Pro	Glu	Ala	Val	Ile	Pro	Tyr	Ala	Asn	His	Glu	Leu	Lys	Glu	Glu
			340		345									350	
Asn	Arg	Thr	Leu	Trp	Trp	Lys	Lys	Leu	Leu	Pro	Glu	Leu	Cys	Gln	Arg
			355		360									365	
Ile	Lys	Cys	Gly	Gly	Glu	Lys	Tyr	Gln	Leu	Tyr	Leu	Ser	Ser	Leu	Lys
			370		375									380	
Ala															
385															

&lt;210&gt; 3671

&lt;211&gt; 828

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3671

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120
agggcacctg gggtaagtaa aaacaaacac atagagcctg cctggagaag ctcattgtct
180
gatggaaaga taagcaagaa gagttaattt ctaatcaata tgataaaaag gtcagagagc
240
agttttctgaa aaacatgttt ttgagttgag tcctgaaaga caaggagatg ttagtaaagc
300
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360
aagagcatgc cccatttgga gaagcatcaa gaagcccacg cgttagaagc accggcccca
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480
tacatacata agcatataga tacatatagc caaagttacc tttttaatga tcttttttac
540
ccagtgtatt ctggaggtcg aatggtcaca tatgaacatc tccgagaggt tgtgtttggc
600
aaaagtgaag atgagcatta tcccctttgg aaatcagtca ttggagggat gatggctggt
660
gttattggcc agtttttagc caatccaact gacctagtga aggttcagat gcaaattggaa
720
ggaaaaagga aactggaagg aaaaccattg cgatttcgtg gtgtacatca tgcatttgca
780
aaaatccttag ctgaaggagg aatacgaggg ctttgggcag gctgggta
828

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&lt;210&gt; 3672

<211> 124  
 <212> PRT  
 <213> Homo sapiens

<400> 3672  
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 Tyr Ser Gln Ser Tyr Leu Phe Asn Asp Leu Phe Tyr Pro Val Tyr Ser  
 20 25 30  
 Gly Gly Arg Met Val Thr Tyr Glu His Leu Arg Glu Val Val Phe Gly  
 35 40 45  
 Lys Ser Glu Asp Glu His Tyr Pro Leu Trp Lys Ser Val Ile Gly Gly  
 50 55 60  
 Met Met Ala Gly Val Ile Gly Gln Phe Leu Ala Asn Pro Thr Asp Leu  
 65 70 75 80  
 Val Lys Val Gln Met Gln Met Glu Gly Lys Arg Lys Leu Glu Gly Lys  
 85 90 95  
 Pro Leu Arg Phe Arg Gly Val His His Ala Phe Ala Lys Ile Leu Ala  
 100 105 110  
 Glu Gly Gly Ile Arg Gly Leu Trp Ala Gly Trp Val  
 115 120

<210> 3673  
 <211> 1052  
 <212> DNA  
 <213> Homo sapiens

<400> 3673  
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 120  
 gagcagtggt acagcttcaa tgatcaacat gtcagcagga taacacaaga ggacattaag  
 180  
 aaaacacatg gtggatcttc aggaagcaga ggatattatt ctagtgtttt cgcaagttcc  
 240  
 acaaatgcat atatgctgat ctatagactg aaggatccag ccagaaatgc aaaatttcta  
 300  
 gaagtggatg aatacccaga acatattaaa aacttgggtgc agaaagagag agagttggaa  
 360  
 gaacaagaaa agagacaacg agaaattgag cgcaatacat gcaagataaa attattctgt  
 420  
 ttgcatccta caaaacaagt aatgatggaa aataaattgg aggttcataa ggataagaca  
 480  
 ttaaaggaag cagtagaaat ggcttataag atgatggatt tagaagaggt aatacccctg  
 540  
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 600  
 ggagaagaag atacaccaat ggggcttcta ctaggtggcg tcaagtcaac atatatgttt  
 660  
 gatctgctgt tggagacgag aaagcctgat caggttttcc aatcttataa acctggaggg  
 720  
 gagccatttt acaccatttt tagttgggtct gtacttagaa ttttcctgag aaaggttttt  
 780

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 840  
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 900  
 agagttgtgt acataatttt aaaaacaaca aaaaacaaca aagcttctag cttacggtct  
 960  
 tcagtgggtt ttttcttctc cagtgggcgg tactgaatca ttctggatgc tgtcaatccc  
 1020  
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 1052

<210> 3674

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3674

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Phe	Ser	Val	Met	Val	His	Ser	Gly	Ser	Ala	Ala	Gly	Gly	His	Tyr	Tyr	20	25	30	
Ala	Cys	Ile	Lys	Ser	Phe	Ser	Asp	Glu	Gln	Trp	Tyr	Ser	Phe	Asn	Asp	35	40	45	
Gln	His	Val	Ser	Arg	Ile	Thr	Gln	Glu	Asp	Ile	Lys	Lys	Thr	His	Gly	50	55	60	
Gly	Ser	Ser	Gly	Ser	Arg	Gly	Tyr	Tyr	Ser	Ser	Ala	Phe	Ala	Ser	Ser	65	70	75	80
Thr	Asn	Ala	Tyr	Met	Leu	Ile	Tyr	Arg	Leu	Lys	Asp	Pro	Ala	Arg	Asn	85	90	95	
Ala	Lys	Phe	Leu	Glu	Val	Asp	Glu	Tyr	Pro	Glu	His	Ile	Lys	Asn	Leu	100	105	110	
Val	Gln	Lys	Glu	Arg	Glu	Leu	Glu	Gln	Glu	Lys	Arg	Gln	Arg	Glu		115	120	125	
Ile	Glu	Arg	Asn	Thr	Cys	Lys	Ile	Lys	Leu	Phe	Cys	Leu	His	Pro	Thr	130	135	140	
Lys	Gln	Val	Met	Met	Glu	Asn	Lys	Leu	Glu	Val	His	Lys	Asp	Lys	Thr	145	150	155	160
Leu	Lys	Glu	Ala	Val	Glu	Met	Ala	Tyr	Lys	Met	Met	Asp	Leu	Glu	Glu	165	170	175	
Val	Ile	Pro	Leu	Asp	Cys	Cys	Arg	Leu	Val	Lys	Tyr	Asp	Glu	Phe	His	180	185	190	
Asp	Tyr	Leu	Glu	Arg	Ser	Tyr	Glu	Gly	Glu	Glu	Asp	Thr	Pro	Met	Gly	195	200	205	
Leu	Leu	Leu	Gly	Gly	Val	Lys	Ser	Thr	Tyr	Met	Phe	Asp	Leu	Leu	Leu	210	215	220	
Glu	Thr	Arg	Lys	Pro	Asp	Gln	Val	Phe	Gln	Ser	Tyr	Lys	Pro	Gly	Gly	225	230	235	240
Glu	Pro	Phe	Tyr	Thr	Ile	Phe	Ser	Trp	Ser	Val	Leu	Arg	Ile	Phe	Leu	245	250	255	
Arg	Lys	Val	Phe	Phe	Leu	Leu										260			

<210> 3675

<211> 837

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3675

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120
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180
tggttcccac aggaaggagg cgggatcagt cgcgtcgggg tctgtaaggt catgcacccc
240
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&lt;210&gt; 3676

&lt;211&gt; 154

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3676

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Pro Glu Gly Asn Gly Arg Ser Gly Phe Leu Ile His Gly Glu Arg Gln
50           55           60
Lys Asp Lys Leu Val Val Leu Glu Cys Tyr Val Arg Lys Asp Leu Val
65           70           75           80
Tyr Thr Lys Ala Asn Pro Thr Phe His His Trp Lys Val Asp Asn Arg
85           90           95
Lys Phe Gly Leu Thr Phe Gln Ser Pro Ala Asp Ala Arg Ala Phe Asp
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Arg Gly Val Arg Lys Ala Ile Glu Asp Leu Ile Glu Glu Val Glu Asn

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3679

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&lt;210&gt; 3680

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3680

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 Glu Lys Pro Pro Arg Pro Pro Arg Pro Leu His Leu Ser Asp Arg Ser  
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&lt;210&gt; 3685

&lt;211&gt; 1293

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3685

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<210> 3688

<211> 57  
 <212> PRT  
 <213> Homo sapiens

<400> 3688  
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           20                  25                  30  
 Glu Tyr Pro Pro Gly Leu Leu Val Ala Val His Leu Phe Ala Leu Met  
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<210> 3689  
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 <212> DNA  
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&lt;210&gt; 3690

&lt;211&gt; 504

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3690

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			20					25					30		
Thr	Asp	Glu	Ala	Glu	Lys	Arg	Ser	Arg	Lys	Pro	Glu	Lys	Glu	Pro	Arg
			35					40					45		
Arg	Ser	Gly	Arg	Ala	Thr	Asn	His	Asp	Ser	Cys	Asp	Ser	Cys	Lys	Glu
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Gly	Gly	Asp	Leu	Leu	Cys	Cys	Asp	His	Cys	Pro	Ala	Ala	Phe	His	Leu
65					70					75				80	
Gln	Cys	Cys	Asn	Pro	Pro	Leu	Ser	Glu	Glu	Met	Leu	Pro	Pro	Gly	Glu
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Trp	Met	Cys	His	Arg	Cys	Thr	Val	Arg	Arg	Lys	Lys	Arg	Glu	Gln	Lys
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Lys	Glu	Leu	Gly	His	Val	Asn	Gly	Leu	Val	Asp	Lys	Ser	Gly	Lys	Arg
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Thr	Thr	Ser	Pro	Ser	Ser	Asp	Thr	Asp	Leu	Leu	Asp	Arg	Ser	Ala	Ser
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Ala	Ser	Arg	Pro	Gly	Thr	Pro	Thr	Ser	Ser	Ala	Ser	Thr	Glu	Thr	Pro
			165						170					175	
Thr	Ser	Glu	Gln	Asn	Asp	Val	Asp	Glu	Asp	Ile	Ile	Asp	Val	Asp	Glu
			180					185					190		
Glu	Pro	Val	Ala	Ala	Glu	Pro	Asp	Tyr	Val	Gln	Pro	Gln	Leu	Arg	Arg
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 Thr Gln His Glu Leu Asp His Asn Gly Leu Val Pro Leu Pro Val Lys  
 260 265 270  
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 Val Phe Asp Arg Phe Gln Asp Thr Val Ser Gln His Val Val Lys Val  
 340 345 350  
 Asp Phe Leu Asn Arg Ile His Lys Lys His Pro Pro Asn Arg Arg Val  
 355 360 365  
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 370 375 380  
 Ser Gln Tyr Gln Phe Pro Pro Pro Leu Ile Ala Pro Ala Ala Ile Arg  
 385 390 395 400  
 Asp Gly Glu Leu Ile Cys Asn Gly Ile Pro Glu Glu Ser Gln Met His  
 405 410 415  
 Leu Leu Asn Ser Glu His Leu Ala Thr Gln Ala Glu Gln Gln Glu Trp  
 420 425 430  
 Leu Cys Ser Val Val Ala Leu Gln Cys Ser Ile Leu Lys His Leu Ser  
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 Ala Lys Gln Met Pro Ser His Trp Asp Ser Glu Gln Thr Glu Lys Ala  
 450 455 460  
 Asp Ile Lys Pro Val Ile Val Thr Asp Ser Ser Val Thr Thr Ser Leu  
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&lt;210&gt; 3691

&lt;211&gt; 418

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3691

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<210> 3692

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3692

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		20						25					30		
Ala	Arg	Gln	Ser	Trp	Gly	Gln	Cys	Gln	Pro	Phe	Tyr	Val	Leu	Arg	Gln
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	50					55					60				
Cys	Lys	His	Gly	Glu	Cys	Ile	Gly	Pro	Asn	Lys	Cys	Lys	Cys	His	Pro
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<210> 3693

<211> 2641

<212> DNA

<213> Homo sapiens

<400> 3693

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<210> 3694

<211> 390

<212> PRT

<213> Homo sapiens

<400> 3694

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Cys	Cys	Ala	Pro	Leu	Gly	Val	Arg	Ala	Ser	Gly	Arg	Ala	Val	Pro	Arg
		35					40					45			
Ala	Val	Phe	Ala	Gly	Met	Lys	Arg	Pro	Cys	Glu	Glu	Thr	Thr	Ser	Glu
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Ser	Asp	Met	Asp	Glu	Thr	Ile	Asp	Val	Gly	Ser	Glu	Asn	Asn	Tyr	Ser
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Ser	Gln	Ile	Met	Ala	Arg	Lys	Lys	Arg	Arg	Gly	Ile	Ile	Glu	Lys	Arg
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Ser	Met	Ala	His	His	Xaa	Ser	Ser	Ala	Pro	Pro	Ala	Ser	Leu	Gly	Arg
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			245						250				255		
Cys	Leu	Arg	Val	Asn	Pro	Leu	Ser	Pro	Leu	His	Asn	Phe	Arg	Ser	Ala
		260						265				270			
Ser	Ala	His	Gly	Ser	Ala	Leu	Leu	Thr	Ala	Thr	Phe	Ala	His	Ala	Asp

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Pro Leu Ser Thr Ser Leu Leu Ser Leu Ser Ala Thr Val His Ala Ala				
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Ala Ala Ala Ala Thr Ala Ala Ala His Ser Phe Pro Leu Ser Phe Ala				
	325	330	335	
Gly Ala Phe Pro Met Leu Pro Pro Asn Ala Ala Ala Val Ala Ala				
	340	345	350	
Ala Thr Ala Ile Ser Pro Pro Leu Ser Val Ser Ala Thr Ser Ser Pro				
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Gln Gln Thr Ser Ser Gly Thr Asn Asn Lys Pro Tyr Arg Pro Trp Gly				
370	375	380		
Thr Glu Val Gly Ala Phe				
385	390			

&lt;210&gt; 3695

&lt;211&gt; 1615

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3695

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&lt;210&gt; 3696

&lt;211&gt; 146

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3696

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 Cys Asn Ser Trp Ser Ser Pro Gln Leu Gln Ser Ser Leu Pro Glu Pro  
 50 55 60  
 His Asp Arg Pro Leu Ala Leu Pro Leu Ser Asp Ser Gln Ile Gln Trp  
 65 70 75 80  
 Phe Tyr Gln Ala Leu Asn Leu Ser Leu Pro Leu Pro Asn Phe His Ala  
 85 90 95  
 Gly Thr Glu Pro Asp Gly Leu Asp Pro Met Val Thr Leu Ser Leu Asn  
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 Leu Gly Leu Ser Phe Ala Glu Leu Arg Arg Met Tyr Leu Phe Leu Asn  
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 Pro Ser  
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&lt;210&gt; 3697

&lt;211&gt; 550

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3697

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&lt;210&gt; 3698

&lt;211&gt; 183

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3698

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Lys	His	Gly	Glu	Cys	Ile	Gly	Pro	Asn	Lys	Cys	Lys	Cys	His	Pro	Gly	50	55	60	
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Arg	Ala	Ser	Cys	Pro	Lys	Phe	Arg	Gln	Cys	Val	Asn	Thr	Phe	Gly	Ser	165	170	175	
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 <213> Homo sapiens

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&lt;210&gt; 3702

&lt;211&gt; 236

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3702

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&lt;210&gt; 3703

&lt;211&gt; 3294

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3703

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<211> 619

<212> PRT

<213> Homo sapiens

<400> 3704

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Lys	Glu	Leu	Tyr	Arg	Arg	Arg	Phe	Pro	Arg	Lys	Thr	Leu	Gly	Pro	Ser
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<211> 191

<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 3708

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Lys	Lys	Leu	Gly	Ile	Glu	Gly	Met	Tyr	Leu	Asn	Val	Ile	Lys	Ala	Val
	50					55					60				
Tyr	Asp	Arg	Pro	Xaa	Val	Ser	Ile	Ile	Leu	Asn	Gly	Glu	Asn	Leu	Gln
65					70					75				80	
Glu	Leu	Gln	Thr	Phe	Gly	Leu	Arg	Ser	Gly	Thr	Gln	Gln	Gly	Cys	Pro
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<210> 3709

<211> 3768

<212> DNA

<213> Homo sapiens

<400> 3709

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3768

<210> 3710

<211> 70

<212> PRT

<213> Homo sapiens

<400> 3710

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Glu	Gln	Thr	Phe	Lys	Lys	Met	Glu	Asn	Tyr	Leu	Arg	His	Lys	Gln	Leu
			20					25					30		
Cys	Asp	Val	Ile	Leu	Val	Ala	Gly	Asp	Arg	Arg	Ile	Pro	Ala	His	Arg
		35					40					45			
Leu	Val	Leu	Ser	Ser	Val	Ser	Asp	Tyr	Phe	Ala	Ala	Met	Phe	Thr	Asn
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<210> 3711

<211> 1366

<212> DNA

<213> Homo sapiens

<400> 3711

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 1260  
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 1366

&lt;210&gt; 3712

&lt;211&gt; 368

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3712

Xaa	His	Phe	Ser	Asp	Thr	Gln	Ala	Ile	Gly	Leu	Val	Glu	Asn	Gln	Ser
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		20						25					30		
Leu	Gly	Arg	Gly	Phe	Asn	Thr	Gly	Val	Ile	Leu	Leu	Arg	Leu	Asp	Arg
	35						40					45			
Leu	Arg	Gln	Ala	Gly	Trp	Glu	Gln	Met	Trp	Arg	Leu	Thr	Ala	Arg	Arg
	50					55					60				
Glu	Leu	Leu	Ser	Leu	Pro	Ala	Ala	Ser	Leu	Ala	Asp	Gln	Asp	Ile	Phe
65					70					75				80	
Asn	Ala	Val	Ile	Lys	Glu	His	Pro	Gly	Leu	Val	Gln	Arg	Leu	Pro	Cys
			85					90					95		
Val	Trp	Asn	Val	Gln	Leu	Ser	Asp	His	Thr	Leu	Ala	Glu	Arg	Cys	Tyr
		100						105					110		
Ser	Glu	Ala	Ser	Asp	Leu	Lys	Val	Ile	His	Trp	Asn	Ser	Pro	Lys	Lys
	115					120						125			
Leu	Arg	Val	Lys	Asn	Lys	His	Val	Glu	Phe	Phe	Arg	Asn	Phe	Tyr	Leu
	130					135					140				
Thr	Phe	Leu	Glu	Tyr	Asp	Gly	Asn	Leu	Leu	Arg	Arg	Glu	Leu	Phe	Val
145					150					155				160	
Cys	Pro	Ser	Gln	Pro	Pro	Pro	Gly	Ala	Glu	Gln	Leu	Gln	Gln	Ala	Leu
			165					170					175		
Ala	Gln	Leu	Asp	Glu	Glu	Asp	Pro	Cys	Phe	Glu	Phe	Arg	Gln	Gln	Gln
	180							185					190		
Leu	Thr	Val	His	Arg	Val	His	Val	Thr	Phe	Leu	Pro	His	Glu	Pro	Pro
	195					200						205			
Pro	Pro	Arg	Pro	His	Asp	Val	Thr	Leu	Val	Ala	Gln	Leu	Ser	Met	Asp
	210				215						220				
Arg	Leu	Gln	Met	Leu	Glu	Ala	Leu	Cys	Arg	His	Trp	Pro	Gly	Pro	Met

225                      230                      235                      240  
 Ser Leu Ala Leu Tyr Leu Thr Asp Ala Glu Ala Gln Gln Phe Leu His  
                                  245                      250                      255  
 Phe Val Glu Ala Ser Pro Val Leu Ala Ala Arg Gln Asp Val Ala Tyr  
                                  260                      265                      270  
 His Val Val Tyr Arg Glu Gly Pro Leu Tyr Pro Val Asn Gln Leu Arg  
                                  275                      280                      285  
 Asn Val Ala Leu Ala Gln Ala Leu Thr Pro Tyr Val Phe Leu Ser Asp  
                                  290                      295                      300  
 Ile Asp Phe Leu Pro Ala Tyr Ser Leu Tyr Asp Tyr Leu Arg Ala Ser  
 305                                   310                      315                      320  
 Ile Glu Gln Leu Gly Leu Gly Ser Arg Arg Lys Ala Ala Leu Val Val  
                                  325                      330                      335  
 Pro Ala Phe Glu Thr Leu Arg Tyr Arg Phe Ser Phe Pro His Ser Lys  
                                  340                      345                      350  
 Val Glu Leu Leu Ala Leu Leu Asp Ala Gly Thr Leu Tyr Thr Phe Arg  
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&lt;210&gt; 3713

&lt;211&gt; 1719

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3713

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&lt;210&gt; 3714

&lt;211&gt; 488

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3714

Met	Asp	Ser	Glu	Tyr	Ser	Gly	Asp	Gln	Ser	Asp	Asp	Gly	Gly	Ala
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Thr	Pro	Val	Gln	Asp	Glu	Arg	Asp	Ser	Gly	Ser	Asp	Gly	Glu	Asp
			20				25					30		
Val	Asn	Glu	Gln	His	Ser	Gly	Ser	Asp	Thr	Gly	Ser	Val	Glu	Arg
			35				40					45		
Ser	Glu	Asn	Glu	Thr	Ser	Asp	Arg	Glu	Asp	Gly	Pro	Pro	Lys	Gly
			50				55				60			
His	Val	Thr	Asp	Ser	Glu	Asn	Asp	Glu	Pro	Leu	Asn	Leu	Asn	Ala
							70				75			80
Asp	Ser	Glu	Ser	Glu	Glu	Leu	His	Arg	Gln	Lys	Asp	Ser	Asp	Ser
							85			90			95	
Ser	Glu	Glu	Arg	Ala	Glu	Pro	Pro	Ala	Ser	Asp	Ser	Glu	Asn	Glu
			100				105					110		
Val	Asn	Gln	His	Gly	Ser	Asp	Ser	Glu	Ser	Glu	Glu	Thr	Arg	Lys
			115				120					125		
Pro	Gly	Ser	Asp	Ser	Glu	Asn	Glu	Glu	Leu	Leu	Asn	Gly	His	Ala
			130				135				140			
Asp	Ser	Glu	Asn	Glu	Asp	Val	Gly	Lys	His	Pro	Ala	Ser	Asp	Ser
														Glu

145                      150                      155                      160  
 Ile Glu Glu Leu Gln Lys Ser Pro Ala Ser Asp Ser Glu Thr Glu Asp  
                                  165                      170                      175  
 Ala Leu Lys Pro Gln Ile Ser Asp Ser Glu Ser Glu Glu Pro Pro Arg  
                                  180                      185                      190  
 His Gln Ala Ser Asp Ser Glu Asn Glu Glu Pro Pro Lys Pro Arg Met  
                                  195                      200                      205  
 Ser Asp Ser Glu Ser Glu Glu Leu Pro Lys Pro Gln Val Ser Asp Ser  
                                  210                      215                      220  
 Glu Ser Glu Glu Pro Pro Arg His Gln Ala Ser Asp Ser Glu Asn Glu  
 225                                   230                                   235                                   240  
 Glu Leu Pro Lys Pro Arg Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro  
                                  245                                   250                                   255  
 Arg His Gln Ala Ser Asp Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg  
                                  260                                   265                                   270  
 Ile Ser Asp Ser Glu Ser Glu Asp Pro Pro Arg Asn Gln Ala Ser Asp  
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 Ser Glu Asn Glu Glu Leu Pro Lys Pro Arg Val Ser Asp Ser Glu Ser  
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 Glu Gly Pro Gln Lys Gly Pro Ala Ser Asp Ser Glu Thr Glu Asp Ala  
 305                                   310                                   315                                   320  
 Ser Arg His Lys Gln Lys Pro Glu Ser Asp Asp Asp Ser Asp Arg Glu  
                                  325                                   330                                   335  
 Asn Lys Gly Glu Asp Thr Glu Met Gln Asn Asp Ser Phe His Ser Asp  
                                  340                                   345                                   350  
 Ser His Met Asp Arg Lys Lys Phe His Ser Ser Asp Ser Glu Glu Glu  
                                  355                                   360                                   365  
 Glu His Lys Lys Gln Lys Met Asp Ser Asp Glu Asp Glu Lys Glu Gly  
                                  370                                   375                                   380  
 Glu Glu Glu Lys Val Ala Lys Arg Lys Ala Ala Val Leu Ser Asp Ser  
 385                                   390                                   395                                   400  
 Glu Asp Glu Glu Lys Ala Ser Ala Lys Lys Ser Arg Val Val Ser Asp  
                                  405                                   410                                   415  
 Ala Asp Asp Ser Asp Ser Asp Ala Val Ser Asp Lys Ser Gly Lys Arg  
                                  420                                   425                                   430  
 Glu Lys Thr Ile Ala Ser Asp Ser Glu Glu Glu Ala Gly Lys Glu Leu  
                                  435                                   440                                   445  
 Ser Asp Lys Lys Asn Glu Glu Lys Asp Leu Phe Gly Ser Asp Ser Glu  
                                  450                                   455                                   460  
 Ser Gly Asn Glu Glu Glu Asn Leu Ile Ala Asp Ile Phe Gly Glu Ser  
 465                                   470                                   475                                   480  
 Gly Asp Glu Glu Glu Glu Glu Phe  
                                  485

&lt;210&gt; 3715

&lt;211&gt; 288

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3715

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120

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 180  
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 288

<210> 3716

<211> 96

<212> PRT

<213> Homo sapiens

<400> 3716

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		20					25					30			
Gly	Lys	Ile	Arg	Ser	Tyr	Glu	Glu	His	Leu	Glu	Lys	His	Arg	Lys	Asp
	35					40					45				
Lys	Ala	His	Lys	Arg	Tyr	Leu	Leu	Met	Ser	Ile	Asp	Gln	Arg	Lys	Lys
	50					55				60					
Met	Leu	Lys	Asn	Leu	Arg	Asn	Thr	Asn	Tyr	Asp	Val	Phe	Glu	Lys	Ile
65				70					75				80		
Cys	Trp	Gly	Leu	Gly	Ile	Glu	Tyr	Thr	Phe	Pro	Pro	Leu	Tyr	Tyr	Arg
			85					90					95		

<210> 3717

<211> 1545

<212> DNA

<213> Homo sapiens

<400> 3717

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&lt;210&gt; 3718

&lt;211&gt; 374

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3718

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 His Leu Ile Leu Asp Ser Ser Ser Lys Ile Cys Asp Leu Asn Ala Asn  
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 Thr Glu Ser Glu Val Pro Gly Gly Gln Ser Val Gly Val Gln Gly Glu  
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 Ala Ala Cys Val Ser Ile Pro His Leu Asp Leu Lys Asn Val Ser Asp  
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 Gly Asp Lys Trp Glu Glu Pro Phe Pro Ala Phe Lys Ser Trp Gln Glu  
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 Asp Ser Glu Ser Gly Glu Ala Gln Leu Ser Pro Gln Ala Gly Arg Met  
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 Thr Arg Pro Arg Ser Asn Thr Leu Pro Lys Ser Phe Gly Ser Ser Leu  
 260 265 270  
 Asp His Glu Asp Glu Glu Asn Glu Asp Glu Pro Lys Val Ile Gln Lys  
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 Glu Lys Lys Pro Ser Lys Glu Ala Thr Leu Glu Leu Ile Leu Lys Arg  
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 Leu Lys Glu Lys Arg Ile Glu Arg Cys Leu Pro Glu Asp Ile Lys Lys  
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 Met Thr Lys Asp His Leu Val Glu Glu Lys Ala Ser Leu Gln Lys Ser  
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&lt;210&gt; 3719

&lt;211&gt; 422

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3719

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 Val Ala Tyr His Glu Gly Arg Glu Lys Arg His Arg Lys Lys Leu Tyr  
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&lt;210&gt; 3722

&lt;211&gt; 1216

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3722

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Ala	Tyr	Pro	Phe	Asn	Ala	Lys	Gln	Pro	Thr	Asp	Met	Ala	Arg	Arg	Gln
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Gln	Lys	Ile	Ser	Lys	Gln	Gln	Leu	Gln	Thr	Val	Lys	Asp	Arg	Phe	Gln
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Ala	Arg	Met	Val	Gln	Ser	Gly	Gly	Cys	Ser	Ala	Asn	Asp	Ser	Arg	Glu
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Val	Phe	Lys	Lys	His	Ile	Glu	Lys	Arg	Val	Arg	Ser	Leu	Pro	Glu	Ile
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Asp	Gly	Leu	Ser	Lys	Glu	Thr	Val	Leu	Ser	Ser	Trp	Met	Ala	Lys	Phe
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Asp	Ala	Ile	Tyr	Arg	Gly	Glu	Glu	Asp	Pro	Arg	Lys	Gln	Gln	Ala	Arg
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2871

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&lt;210&gt; 3723

&lt;211&gt; 830

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3723

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 aaccccaacg agaagctgaa ggtgaacttt gggaccccag agttcctgtc acctgaggtg  
 180  
 gtgaattatg accaaatctc cgataagaca gacatgtgga gtatgggggt gatcacctac  
 240  
 atgctgctga gcggcctctc ccccttctctg ggagatgatg acacagagac cctaaacaac  
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 gttctatctg gcaactggta ctttgatgaa gagacctttg aggccgtatc agacgaggcc  
 360  
 aaagactttg tctccaacct catcgtcaag gaccagaggg cccggatgaa cgctgcccag  
 420  
 tgtctcgccc atccctggct caacaacctg gcggagaaaag ccaaacgctg taaccgacgc  
 480  
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 attgctgtca gcgctgccaa ccgcttcaag aagatcagca gctcgggggc actgatggct  
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 tgaagccaca cagcccagaa ggccagaaaa ggcagccaga tccccagggc agcctcgтта  
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<210> 3724  
 <211> 203  
 <212> PRT  
 <213> Homo sapiens

<400> 3724  
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 Glu Asn Ile Leu Cys Val Asn Thr Thr Gly His Leu Val Lys Ile Ile  
 20 25 30  
 Asp Phe Gly Leu Ala Arg Arg Tyr Asn Pro Asn Glu Lys Leu Lys Val  
 35 40 45  
 Asn Phe Gly Thr Pro Glu Phe Leu Ser Pro Glu Val Val Asn Tyr Asp  
 50 55 60  
 Gln Ile Ser Asp Lys Thr Asp Met Trp Ser Met Gly Val Ile Thr Tyr  
 65 70 75 80  
 Met Leu Leu Ser Gly Leu Ser Pro Phe Leu Gly Asp Asp Asp Thr Glu  
 85 90 95  
 Thr Leu Asn Asn Val Leu Ser Gly Asn Trp Tyr Phe Asp Glu Glu Thr  
 100 105 110  
 Phe Glu Ala Val Ser Asp Glu Ala Lys Asp Phe Val Ser Asn Leu Ile  
 115 120 125  
 Val Lys Asp Gln Arg Ala Arg Met Asn Ala Ala Gln Cys Leu Ala His  
 130 135 140  
 Pro Trp Leu Asn Asn Leu Ala Glu Lys Ala Lys Arg Cys Asn Arg Arg  
 145 150 155 160  
 Leu Lys Ser Gln Ile Leu Leu Lys Lys Tyr Leu Met Lys Arg Arg Trp  
 165 170 175  
 Lys Lys Asn Phe Ile Ala Val Ser Ala Ala Asn Arg Phe Lys Lys Ile  
 180 185 190  
 Ser Ser Ser Gly Ala Leu Met Ala Leu Gly Val  
 195 200

<210> 3725  
 <211> 1244  
 <212> DNA  
 <213> Homo sapiens

<400> 3725  
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 120  
 gaccatcttc acttttgttt tcaggccttt aaaattgtgc cctacaacac agagaccctt  
 180  
 gataaactgc taaccgaatc cctgaagaac aatatccctg caagcggact gcacctcttt  
 240  
 ggaatcaacc agctggaaga agaagatatg atgacaaatc agagggatga agagctgccc  
 300

accctgttgc attttgcgc gaagtatgga ctgaagaacc tcaactgcctt gttgctcacc  
 360  
 tgcccaggag ccctgcaggc gtacagcgtg gccacaagc atggccacta ccccaacacc  
 420  
 atcgctgaga aacacggctt cagggacctg cggcagttca tgcacgagta tgtggaaacg  
 480  
 gtggacatgc tcaagagtca cattaagag gaactgatgc acggggagga ggctgatgct  
 540  
 gtgtacgagt ccatggccca ctttccaca gacctgctta tgaaatgctc gctcaacccc  
 600  
 ggctgtgacg aggatctcta tgagtccatg gctgcctttg tcccagctgc cactgaagac  
 660  
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 780  
 aatctggaga gagatcagtg ccatcttggt caggaagaag atgtttatca cacgggtggat  
 840  
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 900  
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 960  
 aagtatggca gggaatgatg tccaactggt tcttggagc ttctcaacag ggatttctct  
 1020  
 gatgacctgg ctttttgaac cattgctcag agactatccc cttctaaatg gtcttcaccc  
 1080  
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 1140  
 gaccagagtc agtgctggcc ttcctggaag tatttacgca cagttgcaaa ggcaggtaaa  
 1200  
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 1244

&lt;210&gt; 3726

&lt;211&gt; 325

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3726

Xaa	Ile	His	Val	Ser	Gly	Lys	Asp	Ile	Thr	Arg	Lys	Pro	Glu	Ile	Ser
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Gly	His	Val	Ile	Ser	Ala	His	Gly	Leu	Ser	Val	Leu	Asn	Leu	Arg	Asp
			20					25					30		
Gly	Arg	Glu	Leu	Asp	Phe	Arg	Ser	Asp	His	Leu	His	Phe	Cys	Phe	Gln
		35					40					45			
Ala	Phe	Lys	Ile	Val	Pro	Tyr	Asn	Thr	Glu	Thr	Leu	Asp	Lys	Leu	Leu
	50					55					60				
Thr	Glu	Ser	Leu	Lys	Asn	Asn	Ile	Pro	Ala	Ser	Gly	Leu	His	Leu	Phe
65				70					75					80	
Gly	Ile	Asn	Gln	Leu	Glu	Glu	Glu	Asp	Met	Met	Thr	Asn	Gln	Arg	Asp
			85					90					95		
Glu	Glu	Leu	Pro	Thr	Leu	Leu	His	Phe	Ala	Ala	Lys	Tyr	Gly	Leu	Lys
			100					105					110		
Asn	Leu	Thr	Ala	Leu	Leu	Leu	Thr	Cys	Pro	Gly	Ala	Leu	Gln	Ala	Tyr

115 120 125  
 Ser Val Ala Asn Lys His Gly His Tyr Pro Asn Thr Ile Ala Glu Lys  
 130 135 140  
 His Gly Phe Arg Asp Leu Arg Gln Phe Ile Asp Glu Tyr Val Glu Thr  
 145 150 155 160  
 Val Asp Met Leu Lys Ser His Ile Lys Glu Glu Leu Met His Gly Glu  
 165 170 175  
 Glu Ala Asp Ala Val Tyr Glu Ser Met Ala His Leu Ser Thr Asp Leu  
 180 185 190  
 Leu Met Lys Cys Ser Leu Asn Pro Gly Cys Asp Glu Asp Leu Tyr Glu  
 195 200 205  
 Ser Met Ala Ala Phe Val Pro Ala Ala Thr Glu Asp Leu Tyr Val Glu  
 210 215 220  
 Met Leu Gln Ala Ser Thr Ser Asn Pro Ile Pro Gly Asp Gly Phe Ser  
 225 230 235 240  
 Arg Ala Thr Lys Asp Ser Met Ile Arg Lys Phe Leu Glu Gly Asn Ser  
 245 250 255  
 Met Gly Met Thr Asn Leu Glu Arg Asp Gln Cys His Leu Gly Gln Glu  
 260 265 270  
 Glu Asp Val Tyr His Thr Val Asp Asp Asp Glu Ala Phe Ser Val Asp  
 275 280 285  
 Leu Ala Ser Arg Pro Pro Val Pro Val Pro Arg Pro Glu Thr Thr Ala  
 290 295 300  
 Pro Gly Ala His Gln Leu Pro Asp Asn Glu Pro Tyr Ile Phe Lys Gly  
 305 310 315 320  
 Lys Tyr Gly Arg Glu  
 325

&lt;210&gt; 3727

&lt;211&gt; 630

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3727

cggattcgag tcatcaagaa gaaaaaggtc attatgaaga agcgggaagaa gctaaactcta  
 60  
 actcgcccca cccactggt gactgccggg ccccttgtga ccccaactcc agcagggacc  
 120  
 ctgaccccg ctgagaaaca agaaacaggc tgcctcctt tgggtctgga gtccctgcga  
 180  
 gtttcagata gccggcttga ggcattccage agccagtcct ttggtcttgg accacaccga  
 240  
 ggacggctca acattcagtc aggcctggag gacggcgatc tatatgatgg agcctgggtgt  
 300  
 gctgaggagc aggacgccga tccatggttt caggtggagc ctgggcaccc caccgcttc  
 360  
 tcgggtgtta tcacacaggg caggaactct gtctggaggt atgactgggt cacatcatac  
 420  
 aaggtccagt tcagcaatga cagtcggacc tgggtgggaa gtaggaacca cagcagtggg  
 480  
 atggacgcag tatttcctgc caattcagac ccagaaactc cagtgtgaa cctcctgccg  
 540  
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 600

ccttgccctcc gggcagagat cctggcctgc  
630

<210> 3728

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3728

Arg Ile Arg Val Ile Lys Lys Lys Lys Val Ile Met Lys Lys Arg Lys  
1 5 10 15  
Lys Leu Thr Leu Thr Arg Pro Thr Pro Leu Val Thr Ala Gly Pro Leu  
20 25 30  
Val Thr Pro Thr Pro Ala Gly Thr Leu Asp Pro Ala Glu Lys Gln Glu  
35 40 45  
Thr Gly Cys Pro Pro Leu Gly Leu Glu Ser Leu Arg Val Ser Asp Ser  
50 55 60  
Arg Leu Glu Ala Ser Ser Ser Gln Ser Phe Gly Leu Gly Pro His Arg  
65 70 75 80  
Gly Arg Leu Asn Ile Gln Ser Gly Leu Glu Asp Gly Asp Leu Tyr Asp  
85 90 95  
Gly Ala Trp Cys Ala Glu Glu Gln Asp Ala Asp Pro Trp Phe Gln Val  
100 105 110  
Asp Ala Gly His Pro Thr Arg Phe Ser Gly Val Ile Thr Gln Gly Arg  
115 120 125  
Asn Ser Val Trp Arg Tyr Asp Trp Val Thr Ser Tyr Lys Val Gln Phe  
130 135 140  
Ser Asn Asp Ser Arg Thr Trp Trp Gly Ser Arg Asn His Ser Ser Gly  
145 150 155 160  
Met Asp Ala Val Phe Pro Ala Asn Ser Asp Pro Glu Thr Pro Val Leu  
165 170 175  
Asn Leu Leu Pro Glu Pro Gln Val Ala Arg Phe Ile Arg Leu Leu Pro  
180 185 190  
Gln Thr Trp Leu Gln Gly Gly Ala Pro Cys Leu Arg Ala Glu Ile Leu  
195 200 205  
Ala Cys  
210

<210> 3729

<211> 1552

<212> DNA

<213> Homo sapiens

<400> 3729

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120  
atcaagttat cagcagatgt caaaccattt gtccccagat ttgccgggct caatgtggca  
180  
tggttagagt cctcagaagc atgtgtcttc cccagctctg cagccacata ctatccgttt  
240  
gttcaggaac caccagtgc agagcagaaa atatatactg aagacatggc ctttggagct  
300

tcaacttttc cacctcagta tttatcttct gagataactc ttcattccata tgcctattct  
 360  
 ccttataccc ttgactccac acagaatggt tactcagtgc ctggctccca gtatctttat  
 420  
 aaccaaccca gttgttaccg aggttttcaa acagtgaagc atcgaaatga gaacacatgc  
 480  
 cctctccccc aagaaatgaa agctctgttt aagaagaaaa cctatgatga gaaaaaacg  
 540  
 tatgatcagc aaaagtttga cagtgaagg gctgatggaa ctatatcatc tgagataaaa  
 600  
 tcagctagag gttcacatca tttgtccatt tacgctgaga atagtttgaa atcagatggt  
 660  
 taccataagc gaacagacag gaaatccaga atcattgcaa aaaatgtatc tacctccaaa  
 720  
 cctgagtttg aatttaccac actggacttt cctgaactgc aagggtgcaga gaacaatatg  
 780  
 tcagagatac agaagcaacc caagtgggga cctgtccact ctgtctctac cgacatttct  
 840  
 cttctaagag aagtagtaaa accagctgca gtgttatcaa agggtgaaat agtggtgaaa  
 900  
 aataacccaa atgaatctgt aactgctaata gccgctacca attctccttc atgtacaaga  
 960  
 gagttatctt ggacaccaat gggttatggt gttcgacaga cattatctac agaactgtca  
 1020  
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 1080  
 cctaaaaatg ttagtatacc atcttctgaa gctttatctt cggatccttc ctacaacaaa  
 1140  
 gaaaaacaca ttattcatcc tacccaaaag tctaaagcat cacaaggtag tgaccttgaa  
 1200  
 caaatgaag cctcaagaaa gaataagaaa aagaaagaaa aatctacatc aaaatatgaa  
 1260  
 gtccctgacag ttcaagagcc tccaaggatt gaagatgccg aggaatttcc caacctggca  
 1320  
 gttgcatctg aaagaagaga cagaatagag acaccgaaat ttcaatctaa gcagcagcca  
 1380  
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 1440  
 ggcattgctga cagccctgga gaagaagcag cactctcagc atgcaaagca gtcctccaaa  
 1500  
 ccagtggtag tctcagttgg agcagtgccg gtcctttcca aagaatgtgc ac  
 1552

&lt;210&gt; 3730

&lt;211&gt; 422

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3730

Met Ala Phe Gly Ala Ser Thr Phe Pro Pro Gln Tyr Leu Ser Ser Glu  
 1 5 10 15  
 Ile Thr Leu His Pro Tyr Ala Tyr Ser Pro Tyr Thr Leu Asp Ser Thr  
 20 25 30  
 Gln Asn Val Tyr Ser Val Pro Gly Ser Gln Tyr Leu Tyr Asn Gln Pro

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      35      40      45
Ser Cys Tyr Arg Gly Phe Gln Thr Val Lys His Arg Asn Glu Asn Thr
  50      55      60
Cys Pro Leu Pro Gln Glu Met Lys Ala Leu Phe Lys Lys Lys Thr Tyr
65      70      75      80
Asp Glu Lys Lys Thr Tyr Asp Gln Gln Lys Phe Asp Ser Glu Arg Ala
      85      90      95
Asp Gly Thr Ile Ser Ser Glu Ile Lys Ser Ala Arg Gly Ser His His
      100      105      110
Leu Ser Ile Tyr Ala Glu Asn Ser Leu Lys Ser Asp Gly Tyr His Lys
      115      120      125
Arg Thr Asp Arg Lys Ser Arg Ile Ile Ala Lys Asn Val Ser Thr Ser
      130      135      140
Lys Pro Glu Phe Glu Phe Thr Thr Leu Asp Phe Pro Glu Leu Gln Gly
145      150      155      160
Ala Glu Asn Asn Met Ser Glu Ile Gln Lys Gln Pro Lys Trp Gly Pro
      165      170      175
Val His Ser Val Ser Thr Asp Ile Ser Leu Leu Arg Glu Val Val Lys
      180      185      190
Pro Ala Ala Val Leu Ser Lys Gly Glu Ile Val Val Lys Asn Asn Pro
      195      200      205
Asn Glu Ser Val Thr Ala Asn Ala Ala Thr Asn Ser Pro Ser Cys Thr
      210      215      220
Arg Glu Leu Ser Trp Thr Pro Met Gly Tyr Val Val Arg Gln Thr Leu
225      230      235      240
Ser Thr Glu Leu Ser Ala Ala Pro Lys Asn Val Thr Ser Met Ile Asn
      245      250      255
Leu Lys Thr Ile Ala Ser Ser Ala Asp Pro Lys Asn Val Ser Ile Pro
      260      265      270
Ser Ser Glu Ala Leu Ser Ser Asp Pro Ser Tyr Asn Lys Glu Lys His
      275      280      285
Ile Ile His Pro Thr Gln Lys Ser Lys Ala Ser Gln Gly Ser Asp Leu
      290      295      300
Glu Gln Asn Glu Ala Ser Arg Lys Asn Lys Lys Lys Lys Glu Lys Ser
305      310      315      320
Thr Ser Lys Tyr Glu Val Leu Thr Val Gln Glu Pro Pro Arg Ile Glu
      325      330      335
Asp Ala Glu Glu Phe Pro Asn Leu Ala Val Ala Ser Glu Arg Arg Asp
      340      345      350
Arg Ile Glu Thr Pro Lys Phe Gln Ser Lys Gln Gln Pro Gln Asp Asn
      355      360      365
Phe Lys Asn Asn Val Lys Lys Ser Gln Leu Pro Val Gln Leu Asp Leu
      370      375      380
Gly Gly Met Leu Thr Ala Leu Glu Lys Lys Gln His Ser Gln His Ala
385      390      395      400
Lys Gln Ser Ser Lys Pro Val Val Val Ser Val Gly Ala Val Pro Val
      405      410      415
Leu Ser Lys Glu Cys Ala
      420

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&lt;210&gt; 3731

&lt;211&gt; 1704

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3731

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ctgaaccagt tggactctca cgttctgctg tgcttcgagg gaatcacaga tgcttcaagc  
120  
tgtgcagtgc tgctcccagc atcactgttc gtcaatagtc acccaggaat agaccggcct  
180  
ggcatgctct gcagtttccg gatccctggt gcctggtcct gtgcctggtc cctgaatata  
240  
caagcaaata actgcttcag tacaggcttg tctcggcggg tcctgttgac caacgtgggtg  
300  
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360  
atggctcctc tgctgtttta tggctgccgc tctggggaaa tctttgccat tgatctgcgt  
420  
tgtggaatc aaggcaaggg atggaaggcc acccgctgtt tcatgattc agcagtgacc  
480  
tctgtgcgga tcctccaaga tgagcaatac ctgatggctt cagacatggc tggaaagatc  
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600  
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660  
gactgctaca cgagaatctg gagcctccac gatgcccgc tactgagaac cataccctcc  
720  
ccgtaccctg cctccaaggc cgacattccc agtgtggcct tctcgtcgcg gctggggggc  
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900  
aactttttac tgcattctaat gaggggtgtt taagtgcac tcagtgtaca cagatcccat  
960  
cctctggctg ctaggagaga agtgetgaat gttccgtgtg gagatgctca ggaaagtat  
1020  
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1080  
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1140  
acttttctaa ggactgaaga ttggcaaaaa cgaaaagctt cttcctccaa gagcccattg  
1200  
aagaagccca gtgatgagac ggtgagatgg tttgagtcct cgggtgcctgg gtagcaggaa  
1260  
gaaagacctg catcctgcat ctgtacttgg ggaagccagc ggagaggacg gggaggttac  
1320  
ttctctaagt ttctgcagaa atattgaagg ctggagtttg gaatccttaa acttggcctt  
1380  
ctcaaactca gcagcagatc tccgggattc tgctgttatt atccaaaggc gttggaaggaa  
1440  
aagatggatc ttcttacatg ctagaagttt taaacgggtcc ttaacatgcc tttgttcaag  
1500  
caccttccag aatgtaaggc tcagcagctc tggtttctat tacgggtgact tgaatgtcag  
1560

attcaagggc cggcggtcaa aggaaattgg ttttgacttt ttgtaatcta ggagcgacag  
 1620  
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 1680  
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 1704

<210> 3732

<211> 281

<212> PRT

<213> Homo sapiens

<400> 3732

Tyr	Val	Leu	Arg	Asn	Leu	Tyr	Val	Pro	Asn	Arg	Lys	Val	Lys	Ser	Leu
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Cys	Trp	Ala	Ser	Leu	Asn	Gln	Leu	Asp	Ser	His	Val	Leu	Leu	Cys	Phe
			20					25					30		
Glu	Gly	Ile	Thr	Asp	Ala	Ser	Ser	Cys	Ala	Val	Leu	Leu	Pro	Ala	Ser
		35					40					45			
Leu	Phe	Val	Asn	Ser	His	Pro	Gly	Ile	Asp	Arg	Pro	Gly	Met	Leu	Cys
	50					55				60					
Ser	Phe	Arg	Ile	Pro	Gly	Ala	Trp	Ser	Cys	Ala	Trp	Ser	Leu	Asn	Ile
65					70				75					80	
Gln	Ala	Asn	Asn	Cys	Phe	Ser	Thr	Gly	Leu	Ser	Arg	Arg	Val	Leu	Leu
			85						90					95	
Thr	Asn	Val	Val	Thr	Gly	His	Arg	Gln	Ser	Phe	Gly	Thr	Asn	Ser	Asp
			100					105					110		
Val	Leu	Ala	Gln	Gln	Phe	Ala	Leu	Met	Ala	Pro	Leu	Leu	Phe	Asn	Gly
		115					120					125			
Cys	Arg	Ser	Gly	Glu	Ile	Phe	Ala	Ile	Asp	Leu	Arg	Cys	Gly	Asn	Gln
	130					135				140					
Gly	Lys	Gly	Trp	Lys	Ala	Thr	Arg	Leu	Phe	His	Asp	Ser	Ala	Val	Thr
145					150				155					160	
Ser	Val	Arg	Ile	Leu	Gln	Asp	Glu	Gln	Tyr	Leu	Met	Ala	Ser	Asp	Met
			165					170						175	
Ala	Gly	Lys	Ile	Lys	Leu	Trp	Asp	Leu	Arg	Thr	Thr	Lys	Cys	Val	Arg
		180						185					190		
Gln	Tyr	Glu	Gly	His	Val	Asn	Glu	Tyr	Ala	Tyr	Leu	Pro	Leu	His	Val
		195					200					205			
His	Glu	Glu	Glu	Gly	Ile	Leu	Val	Ala	Val	Gly	Gln	Asp	Cys	Tyr	Thr
	210					215					220				
Arg	Ile	Trp	Ser	Leu	His	Asp	Ala	Arg	Leu	Leu	Arg	Thr	Ile	Pro	Ser
225					230				235					240	
Pro	Tyr	Pro	Ala	Ser	Lys	Ala	Asp	Ile	Pro	Ser	Val	Ala	Phe	Ser	Ser
			245					250						255	
Arg	Leu	Gly	Gly	Ser	Arg	Gly	Ala	Pro	Gly	Leu	Leu	Met	Ala	Val	Gly
		260						265					270		
Gln	Asp	Leu	Tyr	Cys	Tyr	Ser	Tyr	Ser							
		275				280									

<210> 3733

<211> 515

<212> DNA

<213> Homo sapiens

&lt;400&gt; 3733

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 120  
 tcctcagtgc gggagagggga gacgccgggg gcangtccat gcctcccgcg gcgtgggtgg  
 180  
 tgcgtcccag gtgacgtcag aagcagcccg cccctgctg gatggtgcgc cctgagtgc  
 240  
 gtcaggagca gaggccggag ctgtccatca gcaccaaagg ccgcggggcg gctcagggca  
 300  
 tggggcccg gttctggggc ggcccagacc ccggtcctg cgccttcccc ttcctcaggc  
 360  
 nccagcccga gttcccgac gccgcgggac tggagtcca gccggtgtg gacgtggagc  
 420  
 ggccgcgcca ccgcgccgac accattctct ccggcccagc agcccccttc ctgcacgac  
 480  
 ggactttccc tggacccag tcagttggag cctct  
 515

&lt;210&gt; 3734

&lt;211&gt; 171

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3734

Xaa	Gly	Arg	Ala	Val	Arg	Arg	Val	Thr	Ala	Gly	Thr	Arg	Pro	Gly	Trp
1				5					10					15	
Val	Ser	Gly	Ser	Arg	Tyr	Arg	Arg	Gly	Arg	Arg	Arg	Gly	Arg	Leu	Lys
			20					25					30		
Gly	Lys	Asp	Pro	Gly	Ser	Ala	Pro	Ser	Ser	Val	Arg	Glu	Arg	Glu	Thr
		35					40				45				
Pro	Gly	Ala	Xaa	Pro	Cys	Leu	Pro	Arg	Arg	Gly	Trp	Cys	Val	Pro	Gly
	50				55					60					
Asp	Val	Arg	Ser	Ser	Pro	Pro	Leu	Pro	Gly	Trp	Cys	Ala	Leu	Ser	Asp
65					70					75				80	
Val	Arg	Ser	Arg	Gly	Arg	Ser	Cys	Pro	Ser	Ala	Pro	Lys	Ala	Ala	Gly
			85						90					95	
Gly	Leu	Arg	Ala	Trp	Gly	Arg	Gly	Ser	Gly	Ala	Ala	Arg	Ala	Pro	Ala
			100				105						110		
Pro	Ala	Pro	Ser	Pro	Ser	Ser	Gly	Xaa	Ser	Pro	Ser	Ser	Arg	Thr	Pro
		115					120						125		
Arg	Asp	Trp	Ser	Ala	Ser	Arg	Cys	Trp	Thr	Trp	Ser	Gly	Ala	Ala	Thr
	130					135					140				
Ala	Pro	Thr	Pro	Phe	Ser	Pro	Ala	Gln	Gln	Pro	Pro	Ser	Ser	His	Asp
145					150					155				160	
Gly	Leu	Ser	Leu	Asp	Pro	Ser	Gln	Leu	Glu	Pro					
			165						170						

&lt;210&gt; 3735

&lt;211&gt; 2512

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3735

ngcaggttct tcggaaggct tgtagctcca aaatggatcg ccagagtgtt ctccatgtac  
60  
tgggcatatt gaaaaactcc aaatttctca aagtctgcct gcctgcttat gtggtaggga  
120  
tgatcactga acccatccct gacatccgaa accagtatcc agagcacata agcaacatca  
180  
tctccctcct ccaggacctt gtaagtgtct tccctgccag ctctgtgcag gaaacttcca  
240  
tgctggtttc cctcctgcc aacctcttta atgctctgag agcctctggt gttgacatag  
300  
aagaggaaac ggagaagaac ctggaaaagg tacagactat cattgaacat ctgcaggaaa  
360  
agaggcgaga gggcactttg agagtggata cctacactct agtgcagcct gaggcagaag  
420  
accatgttga gagctaccga accatgccca tttaccctac ctacaatgaa gtgcacttgg  
480  
atgagaggcc cttccttcgc cccaatatca tttctggaaa atacgacagc actgctatct  
540  
atctggatac ccacttccgg ctctgcgag aagatttcgt cagaccttta cgggaaggta  
600  
ttttggaact tctccaaagc tttgaagacc agggcctgag gaagagaaag tttgatgaca  
660  
tccgaatcta ctttgacacc aggattatca ccccatgtg ttcacatca ggcatagtct  
720  
acaagtgca gtttgacaca aaaccactga agtttggtcg ctggcagaat tccaaacgat  
780  
tgctctatgg gtctttggta tgcattgcca aggacaactt cgagacattt ctttttgcca  
840  
ccgtatctaa caggagcag gaagatctct gccgaggaat tgtccagctc tgcttcaatg  
900  
agcaaagcca acagctgcta gcagaggctc agccctctga ctcttccctc atggtagaga  
960  
caactgcata ctttgaggcc tacaggcacg tcctggaagg actccaggag gtccaggagg  
1020  
aagatgttcc cttccaggag aatatcgtgg agtgtaactc tcatgtgaag gagccaagg  
1080  
acttgctaata ggggggcaga tatgacttta ccccttaat agagaatcct tcagccactg  
1140  
gggaatttct aagaaatgtc gagggtttga gacatcccag aattaatgtc ttagatcctg  
1200  
gccagtggcc ctcaaaagaa gccctgaagc tggatgactc ccagatggaa gccttgca  
1260  
ttgctctcac aagggaactg gctattattc aaggacctcc tggaacaggc aaaacctatg  
1320  
tgggtctaaa aattgttcag gccctcctaa ccaacgagtc tgtttgcaa attagcctcc  
1380  
agaagttccc catcttggtt gtgtgttata ctaatcatgc tttggaccag tttctggaag  
1440  
gcatctacaa ttgtcagaag accagcattg tgcgggtggg tggaaggagc aacagtga  
1500  
tcctgaagca gttcacccta agggagctga ggaacaagc ggaattccgc cgcaacctcc  
1560

ccatgcacct ccgaagggcc tacatgagta tcatgacaca gatgaaggag tcagagcaag  
 1620  
 agcttcatga aggagccaag accctggagt gcacatgcg tgggtgccta cggaacagt  
 1680  
 acctgcagaa gtacatctca ccccgact gggaaagtct catgaatgga ccagtgcagg  
 1740  
 atagtgaatg gatttgcctc cagcactgga agcattccat gatgctggag tggctaggtc  
 1800  
 ttggtgctcg ttctttcacg caaagtgttt ctccagcagg acctgagaat acagcccagg  
 1860  
 cagaagggga tgaggaggaa gaaggggagg aggagagttc gctgatagag atcgagagg  
 1920  
 aagctgacct gattcaagca gaccgggtga ttgaggagga agaggtggtg aggccccagg  
 1980  
 ggcggaagaa ggaagagagt ggagcagacc aggagttggc taaaatgctt ctggccatga  
 2040  
 ggctagacca ttgtggcact gggacagcag ctggacagga gcaagccaca ggagagtggc  
 2100  
 agaccagcg caaccagaa aaagaaaatg aaaaaaagag tgaaggatga gcttcgcaaa  
 2160  
 ctgaacacca tgcctgcagc cgaggccaac gagatcgagg atgtttggca cctggacctc  
 2220  
 agttctcgct ggcagcttta taggctctgg ctacagttgt accaggctga cccccgccc  
 2280  
 gggaagatec tcagctatga acgccagtac cgcacatcag cagaaagaat ggccgagctg  
 2340  
 agactccagg aagacctgca cattcttaaa gatgccagg ttgtaggaat gacaaccaca  
 2400  
 ggtgctgcca aataccgcca gatectacag aaggtggagc cgaggattgt catagtggaa  
 2460  
 gaagctgagg aagtccttga ggcccatacc attgccacat tgagcaaagc tt  
 2512

&lt;210&gt; 3736

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3736

Thr	Ile	Val	Ala	Leu	Gly	Gln	Gln	Leu	Asp	Arg	Ser	Lys	Pro	Gln	Glu
1				5					10					15	
Ser	Gly	Arg	Pro	Ser	Ala	Thr	Gln	Lys	Lys	Lys	Met	Lys	Lys	Arg	Val
			20					25						30	
Lys	Asp	Glu	Leu	Arg	Lys	Leu	Asn	Thr	Met	Pro	Ala	Ala	Glu	Ala	Asn
			35				40					45			
Glu	Ile	Glu	Asp	Val	Trp	His	Leu	Asp	Leu	Ser	Ser	Arg	Trp	Gln	Leu
	50					55					60				
Tyr	Arg	Leu	Trp	Leu	Gln	Leu	Tyr	Gln	Ala	Asp	Thr	Pro	Pro	Gly	Lys
65					70					75				80	
Ile	Leu	Ser	Tyr	Glu	Arg	Gln	Tyr	Arg	Thr	Ser	Ala	Glu	Arg	Met	Ala
				85					90					95	
Glu	Leu	Arg	Leu	Gln	Glu	Asp	Leu	His	Ile	Leu	Lys	Asp	Ala	Gln	Val
			100					105					110		
Val	Gly	Met	Thr	Thr	Thr	Gly	Ala	Ala	Lys	Tyr	Arg	Gln	Ile	Leu	Gln

	115		120		125										
Lys	Val	Glu	Pro	Arg	Ile	Val	Ile	Val	Glu	Glu	Ala	Ala	Glu	Val	Leu
	130				135								140		
Glu	Ala	His	Thr	Ile	Ala	Thr	Leu	Ser	Lys	Ala					
145					150					155					

&lt;210&gt; 3737

&lt;211&gt; 1046

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3737

```

ngtgctgtgg ctgcaggctg gcagggtggca gccccatgcc cagggtgcctg cgtatgctac
60
aatgagccca aggtgacgac aagctgcccc cagcagggcc tgcaggctgt gcccgtgggc
120
atccctgctg ccagccagcg catcttctctg cacggcaacc gcatctcgca tgtgccagct
180
gccagcttcc gtgcctgccc caacctcacc atcctgtggc tgcactcgaa tgtgctggcc
240
cgaattgatg cggtgcctt cactggcctg gccctcctgg gagcactgga cctcagcgat
300
aatgcacagc tccggtctgt ggacctgcc acattccacg gcctggggccg cctacacacg
360
ctgcacctgg accgctgcgg cctgcaggag ctggggcccgg ggctgttccg cggcctggct
420
gccctgcagt acctctacct gcaggacaac gcgctgcagg cactgcctga tgacaccttc
480
cgcgacctgg gaaacctcac acacctcttc ctgcacggca accgcatctc cagcgtgccc
540
gagcgcgcct tccgtgggct gcacagcctc gaccgtctcc tactgcacca gaaccgcgtg
600
gccccatgtg acccgcatgc ctcccgtagc cttggccgcc tcatgacact ctatctgttt
660
gccaacaatc tatcagcgct gcccactgag gccctggccc ccctgcgtgc cctgcagtac
720
ctgaggctca acgacaacct ctgggtgtgt gactgccggg cagccccact ctgggcctgg
780
ctgcagaagt tccgcggctc ctctccgag gtgccctgca gcctcccga acgcctggct
840
ggccgtgacc tcaaacgcct agctgccaat gacctgcagg gctgcgctgt ggccaccggc
900
ccttaccatc ccatctggac cggcagggcc accgatgagg agccgctggg gcttcccaag
960
tgctgccagc cagatgccgc tgacaaggcc tcagtactgg agcctggaag accagcttcg
1020
gcaggcaatg cgctgaaggg acgcgt
1046

```

&lt;210&gt; 3738

&lt;211&gt; 348

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3738

Xaa Ala Val Ala Ala Gly Trp Gln Val Ala Ala Pro Cys Pro Gly Ala  
 1 5 10 15  
 Cys Val Cys Tyr Asn Glu Pro Lys Val Thr Thr Ser Cys Pro Gln Gln  
 20 25 30  
 Gly Leu Gln Ala Val Pro Val Gly Ile Pro Ala Ala Ser Gln Arg Ile  
 35 40 45  
 Phe Leu His Gly Asn Arg Ile Ser His Val Pro Ala Ala Ser Phe Arg  
 50 55 60  
 Ala Cys Arg Asn Leu Thr Ile Leu Trp Leu His Ser Asn Val Leu Ala  
 65 70 75 80  
 Arg Ile Asp Ala Ala Ala Phe Thr Gly Leu Ala Leu Leu Gly Ala Leu  
 85 90 95  
 Asp Leu Ser Asp Asn Ala Gln Leu Arg Ser Val Asp Pro Ala Thr Phe  
 100 105 110  
 His Gly Leu Gly Arg Leu His Thr Leu His Leu Asp Arg Cys Gly Leu  
 115 120 125  
 Gln Glu Leu Gly Pro Gly Leu Phe Arg Gly Leu Ala Ala Leu Gln Tyr  
 130 135 140  
 Leu Tyr Leu Gln Asp Asn Ala Leu Gln Ala Leu Pro Asp Asp Thr Phe  
 145 150 155 160  
 Arg Asp Leu Gly Asn Leu Thr His Leu Phe Leu His Gly Asn Arg Ile  
 165 170 175  
 Ser Ser Val Pro Glu Arg Ala Phe Arg Gly Leu His Ser Leu Asp Arg  
 180 185 190  
 Leu Leu Leu His Gln Asn Arg Val Ala His Val His Pro His Ala Phe  
 195 200 205  
 Arg Asp Leu Gly Arg Leu Met Thr Leu Tyr Leu Phe Ala Asn Asn Leu  
 210 215 220  
 Ser Ala Leu Pro Thr Glu Ala Leu Ala Pro Leu Arg Ala Leu Gln Tyr  
 225 230 235 240  
 Leu Arg Leu Asn Asp Asn Pro Trp Val Cys Asp Cys Arg Ala Arg Pro  
 245 250 255  
 Leu Trp Ala Trp Leu Gln Lys Phe Arg Gly Ser Ser Ser Glu Val Pro  
 260 265 270  
 Cys Ser Leu Pro Gln Arg Leu Ala Gly Arg Asp Leu Lys Arg Leu Ala  
 275 280 285  
 Ala Asn Asp Leu Gln Gly Cys Ala Val Ala Thr Gly Pro Tyr His Pro  
 290 295 300  
 Ile Trp Thr Gly Arg Ala Thr Asp Glu Glu Pro Leu Gly Leu Pro Lys  
 305 310 315 320  
 Cys Cys Gln Pro Asp Ala Ala Asp Lys Ala Ser Val Leu Glu Pro Gly  
 325 330 335  
 Arg Pro Ala Ser Ala Gly Asn Ala Leu Lys Gly Arg  
 340 345

&lt;210&gt; 3739

&lt;211&gt; 1252

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3739

tcaccccttat ctctgcatt ttctgggctg agcttttttg acaagggtgct gtgccagtct  
 60

acacccctca gccagctggt cttggagggtc ctgcccctgg gacttggtccg gctcatccag  
 120  
 agtgaggagg gcctggagat gctcattcaa tgagcgggag gcacctctcc cttcccgtaa  
 180  
 cttctccctt aactgggtca gctctcggtc ctgagagtga accaggactt tatattgctg  
 240  
 tattttctct gtcggttggc caggaagccg gccagttgag ttagaaaaca tctctctttg  
 300  
 aggtttctga actgctgttt gttctctgcc aactgggggc gcaatttctc gttgatttct  
 360  
 agaatgttca tctctgcctt ctgctggac aaagggccgg ctgataccac catgctgacg  
 420  
 tttgtggcag aagaggtgga gtcagggact tactgttggtg aaaaatgtga tcactcccca  
 480  
 cagcacttta ggatccttca ccacaaaac aagggttcgag gtgcctcaac tcagagctga  
 540  
 aagcactgcc agtagctcag actctgataa gagtgaggtg gattgtggcc agcgtgccag  
 600  
 gtaaccgtct tgatccatag gctcacattt gatcccaact ggcgggtgct tcttggcatt  
 660  
 aactttggat tcccaaccag taaatcttag caagatctga gtttctccag gtatgatatt  
 720  
 attttgtttg accatcctta tcttcaaggg ctggttgatc tggcagctct tgatgtcagc  
 780  
 ccacaccatg tgaggctgct cttggtgcac cgaatgggga agtttctaca tcagggcctc  
 840  
 ggagaatcca ctggaagccc tggacagtgg gagtgcagcg cacccccagt gtggaggcca  
 900  
 agagcacaca gcactgaagc tccaggacac cctcaggagg acggcaaggg acaattggct  
 960  
 ggtgagagcc cgggtcaccg ggaaccttcg cctgggtcta aacaggattt gccttcagat  
 1020  
 tgcctcagaa acgctgggtg gacttcgctt aacttcccat tcacagggca gccggcagcc  
 1080  
 gcgcgcgcgc gcctcgccc agctcctggc gccgcagatc gccgtccccg cgttcccaaa  
 1140  
 agccccgcgc tcgctcagaa gctcgggcag cctcgcgacc ctcacctacc cctcccaata  
 1200  
 tcgctgctgt ctcaaccgcc gccagccca tagcctgcgg ccagctggat cc  
 1252

&lt;210&gt; 3740

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3740

Met	Gly	Lys	Phe	Leu	His	Gln	Gly	Leu	Gly	Glu	Ser	Thr	Gly	Ser	Pro
1				5				10						15	
Gly	Gln	Trp	Glu	Ser	Ala	Ala	Pro	Pro	Val	Trp	Arg	Pro	Arg	Ala	His
			20					25					30		
Ser	Thr	Glu	Ala	Pro	Gly	His	Pro	Gln	Glu	Asp	Gly	Lys	Gly	Gln	Leu
			35				40					45			
Ala	Gly	Glu	Ser	Pro	Gly	His	Arg	Glu	Pro	Ser	Pro	Gly	Ser	Lys	Gln

```

      50              55              60
Asp Leu Pro Ser Asp Cys Leu Arg Asn Ala Gly Trp Thr Ser Arg Asn
65              70              75              80
Phe Pro Phe Thr Gly Gln Pro Ala Ala Ala Pro Pro Arg Leu Gly Pro
      85              90              95
Ala Pro Gly Ala Ala Asp Arg Pro Ser Arg Val Pro Lys Ser Pro Ala
      100              105              110
Leu Ala Gln Lys Leu Gly Gln Pro Arg Asp Pro His Leu Pro Leu Pro
      115              120              125
Ile Ser Pro Leu Ser Gln Pro Pro Pro Ser Pro
      130              135

```

&lt;210&gt; 3741

&lt;211&gt; 562

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3741

```

cagacagcaa ggcacggccc agctcctcaa ggccacctcc gacctcggcg ggggtggggca
60
gtcgtgtcca ctgtggggat ccacgtcctg actaaccttg tgttcctaga aatccctcac
120
cggcagatcg gtgcctcctg aatcccaccc aaaattccca ctgggaatgt gttcctgaaa
180
gagctgcccc ggcttgagaa agcctctttt cagaccaaac ttcgtattca aagtcaaaa
240
agaactgcac acaattagga cagtcataca agatgctgcc cctaactctg ccacaatctg
300
cgagaaggga ggcggggctt ccgagggcaa agtgcccctg ggaagggatc cgcagggaa
360
agctttgaaa ggaccacagc cccagccac gaggggagca agcacgagcc ggggagagag
420
ctctgcgtc gcacacggga ttcattctcg ccgcctctgc ccgtttccag caacacggag
480
ccaggcggaa acagtttctc cagccattc gcctccccga ctcttcctct cacggcacgg
540
ctgggctgct ttcacacgc gt
562

```

&lt;210&gt; 3742

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3742

```

Met Gly Trp Arg Asn Cys Phe Arg Leu Ala Pro Cys Cys Trp Lys Arg
1              5              10              15
Ala Glu Ala Ala Glu Met Asn Pro Val Cys Glu Arg Arg Ala Leu Ser
      20              25              30
Pro Ala Arg Ala Cys Ser Pro Arg Gly Trp Gly Leu Trp Ser Phe Gln
      35              40              45
Ser Cys Ser Leu Arg Ile Pro Ser Gln Gly His Phe Ala Leu Gly Ser
      50              55              60
Pro Ala Ser Leu Leu Ala Asp Cys Gly Arg Ile Arg Gly Ser Ile Leu

```

```

65          70          75          80
Tyr Asp Cys Pro Asn Cys Val Gln Phe Phe Leu Ser Phe Glu Tyr Glu
          85          90          95
Val Trp Ser Glu Lys Arg Leu Ser Gln Ala Trp Ala Ala Leu Ser Gly
          100          105          110
Thr His Ser Gln Trp Glu Phe Trp Val Gly Phe Arg Arg His Arg Ser
          115          120          125
Ala Gly Glu Gly Phe Leu Gly Thr Gln Gly
          130          135

```

&lt;210&gt; 3743

&lt;211&gt; 468

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3743

```

nntcatgagc cttcttacaa gctccatttt ggcaaggcgc tgacaatggc ggaggctgaa
60
ggcaatgcaa gctgcacagt cagtctaggg ggtgccaata tggcagagac ccacaaagcc
120
atgatcctgc aactcaatcc cagtgagaac tgcacctgga caatagaaag accagaaaac
180
aaaagcatca gaattatctt ttcctatgtc cagcttgatc cagatggaag ctgtgaaagt
240
gaaaacatta aagtctttga cggaacctcc agcaatgggc ctctgctagg gcaagtctgc
300
agtaaaaacg actatgttcc tgtatttgaa tcatcatcca gtacattgac gtttcaaata
360
gttactgact cagcaagaat tcaaagaact gtctttgtgt tctagtagtt cttatttcct
420
aacatcttta ttccaaagtg tggcggttac ctggatccct ggaaggat
468

```

&lt;210&gt; 3744

&lt;211&gt; 134

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3744

```

Xaa His Glu Pro Ser Tyr Lys Leu His Phe Gly Lys Ala Leu Thr Met
1          5          10          15
Ala Glu Ala Glu Gly Asn Ala Ser Cys Thr Val Ser Leu Gly Gly Ala
          20          25          30
Asn Met Ala Glu Thr His Lys Ala Met Ile Leu Gln Leu Asn Pro Ser
          35          40          45
Glu Asn Cys Thr Trp Thr Ile Glu Arg Pro Glu Asn Lys Ser Ile Arg
          50          55          60
Ile Ile Phe Ser Tyr Val Gln Leu Asp Pro Asp Gly Ser Cys Glu Ser
65          70          75          80
Glu Asn Ile Lys Val Phe Asp Gly Thr Ser Ser Asn Gly Pro Leu Leu
          85          90          95
Gly Gln Val Cys Ser Lys Asn Asp Tyr Val Pro Val Phe Glu Ser Ser
          100          105          110
Ser Ser Thr Leu Thr Phe Gln Ile Val Thr Asp Ser Ala Arg Ile Gln

```

115  
Arg Thr Val Phe Val Phe  
130

120

125

&lt;210&gt; 3745

&lt;211&gt; 345

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3745

acgcgtcgaa agggaagagc agaggacgct ggctctcatg gcaggatggt gtgtgtacgg  
60  
gacgctgtgg gagaggaaaa cagccacatg tgggctggct gcttggagga gacacatgag  
120  
ccgtgaacac gtctcccccg gccgctccct ggttccatgc gtgctcgtct tgggcaccac  
180  
gagaacacag ccatgcagcc cccgatcctg cagccacagc cacggcatcg cctggtcgga  
240  
tgcagcatct gtcccggacg cctctcgtg tgggtgccag gcctgccagg ccaagccccg  
300  
attctcaggg gcggcaggag gtgggaggca cgtttgggcg gatcc  
345

&lt;210&gt; 3746

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3746

Met	Ala	Gly	Trp	Cys	Val	Tyr	Gly	Thr	Leu	Trp	Glu	Arg	Lys	Thr	Ala
1				5					10					15	
Thr	Cys	Gly	Leu	Ala	Ala	Trp	Arg	Arg	His	Met	Ser	Arg	Glu	His	Val
			20					25					30		
Ser	Pro	Gly	Arg	Ser	Leu	Val	Pro	Cys	Val	Leu	Val	Leu	Gly	Thr	Thr
			35				40					45			
Arg	Thr	Gln	Pro	Cys	Ser	Pro	Arg	Ser	Cys	Ser	His	Ser	His	Gly	Ile
	50				55					60					
Ala	Trp	Ser	Asp	Ala	Ala	Ser	Ala	Pro	Asp	Ala	Ser	Arg	Cys	Arg	Cys
65				70					75					80	
Gln	Ala	Cys	Gln	Ala	Lys	Pro	Arg	Phe	Ser	Gly	Ala	Ala	Gly	Gly	Gly
			85					90					95		
Arg	His	Val	Trp	Ala	Asp										

&lt;210&gt; 3747

&lt;211&gt; 800

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3747

cctaggcgag gcgctggcgc tggggtctgg ctggcgctcat gcgtgccacg ctctcctcta  
60  
cgcgccggac cctgggatgc tcttcggccg catcccgtg cgctacgcca tactggtgag  
120

aagggggcgc gcccgccac tttctgectg agccccgcac cctctctggt ggtctctct  
180  
ggggcgcccc tgccaatccc cgcttcccc tcccgcagat gcagatgcgc ttcgatggac  
240  
gcctgggctt ccccgcgga ttcgtggaca cgcaggacag aagcctagag gacgggctga  
300  
accgcgagct gcgcgaggag ctgggcgaag cggtgcgc tttccgctg gagcgactg  
360  
actaccgcag ctcccacgtc ggggtcaggg ccacgcgttg tggcccactt ctatgccaag  
420  
cgtctgacgc tcgaggagct gttggctgtg gaggccggcg caacacgcgc caaggaccac  
480  
gggctggagg tgggaccagc ctgggactct gtccctttcc caatttcctc ttctcccaaa  
540  
gctttctctc cccaagaaa gcatccctgg agaaaagtct ttgcccctct gaccttgccc  
600  
tctccccagc tttcttggtg gagttgggat cgtgatcatc tatactctga attagtactg  
660  
ccaacctggg ctttctgtaa aggtctttcc caccctttac caggagagat cctttctaga  
720  
acacactcat ccattgtctct ctgctgttcc ctattgacag tgtgatagat tatcacatta  
780  
tctaggtgtg gcaacctagg  
800

&lt;210&gt; 3748

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3748

Met	Gln	Met	Arg	Phe	Asp	Gly	Arg	Leu	Gly	Phe	Pro	Gly	Gly	Phe	Val
1				5					10					15	
Asp	Thr	Gln	Asp	Arg	Ser	Leu	Glu	Asp	Gly	Leu	Asn	Arg	Glu	Leu	Arg
		20						25					30		
Glu	Glu	Leu	Gly	Glu	Ala	Ala	Ala	Ala	Phe	Arg	Val	Glu	Arg	Thr	Asp
		35				40						45			
Tyr	Arg	Ser	Ser	His	Val	Gly	Val	Arg	Ala	Thr	Arg	Cys	Gly	Pro	Leu
	50					55					60				
Leu	Cys	Gln	Ala	Ser	Asp	Ala	Arg	Gly	Ala	Val	Gly	Cys	Gly	Gly	Arg
65					70					75				80	
Arg	Asn	Thr	Arg	Gln	Gly	Pro	Arg	Ala	Gly	Gly	Gly	Thr	Ser	Leu	Gly
			85					90						95	
Leu	Cys	Pro	Phe	Pro	Asn	Phe	Leu	Phe	Ser	Gln	Ser	Phe	Leu	Ser	Pro
		100						105					110		
Lys	Lys	Ala	Ser	Leu	Glu	Lys	Ser	Leu	Cys	Pro	Ser	Asp	Leu	Ala	Leu
		115				120						125			
Ser	Pro	Ala	Phe	Leu	Val	Glu	Leu	Gly	Ser						
		130				135									

&lt;210&gt; 3749

&lt;211&gt; 648

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3749

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120  
ggctactcca tgcctcggga gggatcgaca agcaagcaga tgccccccag tgatgctgaa  
180  
ggtgacccgc tgatgaacat gctgatgagg ctgcaggagg cagccaacta ctccagcccc  
240  
cagagctatg acagcgactc caacagcaac agccatcacg atgacatctt ggactcctct  
300  
ttggagtcca ctctgtgaca gggggccgga gccagcgcc ctctcttct cctcaccgca  
360  
ttccacctgc atccccaca tcacctgaa gatgacttcc tgagccagcc cccagccaca  
420  
gccttagagc tgcgggaaca ccgagacccc cgtccttca gcctcgacct ggggtgcaggc  
480  
atcccgggccc agctgcctgc ggaccgcttc cttccacagc gagaactgca ctaccttctg  
540  
ttgtacttta attattgttt tgccttggtg ctgtgacctc cctaagacac tgaagatact  
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648

&lt;210&gt; 3750

&lt;211&gt; 105

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3750

Arg	Ala	Pro	Trp	Glu	Asp	Pro	Ala	Lys	Trp	Val	Met	Asp	Thr	Tyr	Pro
1				5					10					15	
Trp	Ala	Ala	Ser	Pro	Gln	Gln	His	Glu	Trp	Pro	Pro	Leu	Leu	Gln	Leu
			20					25					30		
Arg	Pro	Glu	Asp	Val	Gly	Phe	Asp	Gly	Tyr	Ser	Met	Pro	Arg	Glu	Gly
		35				40						45			
Ser	Thr	Ser	Lys	Gln	Met	Pro	Pro	Ser	Asp	Ala	Glu	Gly	Asp	Pro	Leu
	50				55						60				
Met	Asn	Met	Leu	Met	Arg	Leu	Gln	Glu	Ala	Ala	Asn	Tyr	Ser	Ser	Pro
65					70				75					80	
Gln	Ser	Tyr	Asp	Ser	Asp	Ser	Asn	Ser	Asn	Ser	His	His	Asp	Asp	Ile
			85				90						95		
Leu	Asp	Ser	Ser	Leu	Glu	Ser	Thr	Leu							
			100					105							

&lt;210&gt; 3751

&lt;211&gt; 554

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3751

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60

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 120  
 acgcagggcc agagtccgga gccgcggacc cgcgaggtat ttctactacg tggaccacca  
 180  
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 554

&lt;210&gt; 3752

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3752

Ala	Arg	Leu	Ser	Ala	Leu	Ala	Arg	Ala	Leu	Ala	Gly	Pro	Pro	Pro	Arg
1				5					10					15	
Pro	His	His	Gly	Pro	Gly	Pro	Ala	Ala	Ala	Arg	Gly	Ser	Val	Ala	Pro
			20				25						30		
Ser	Gly	Ala	Lys	Gly	Val	Ser	Tyr	Thr	Gln	Gly	Gln	Ser	Pro	Glu	Pro
		35				40					45				
Arg	Thr	Arg	Glu	Val	Phe	Leu	Leu	Arg	Gly	Pro	Pro	Gly	Pro	Ala	Phe
	50					55					60				
Pro	Gly														
65															

&lt;210&gt; 3753

&lt;211&gt; 1426

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3753

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 60  
 gaaccactc tcctaaccga cccccgagag gcggagagaa tgtgggagca cttcagagag  
 120  
 gcctaggtc cgagatcgg gccatctggg ctctgaaagc aaattagttt tccaactcat  
 180  
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 240  
 ttctgctgc actgaccaat cagctccctt tggccttcaa cctcgggaat gatggattag  
 300  
 gggagtctag aaatggacga agccctagaa acgcagctga agacgagcag aggacgcttc  
 360

tcggctacag aatccctccc caccttggag ctcttatctc aggtggacat ggactgcagg  
 420  
 gtccacatgc gacccatcgg cctgacgtgg gtgctgcaac tgaccttggc atggatcctg  
 480  
 ctagaagcct gtggagggag ccgcccactc caagccaggc cccagcaaca ccatgggctg  
 540  
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 1426

&lt;210&gt; 3754

&lt;211&gt; 261

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3754

Met Asp Glu Ala Leu Glu Thr Gln Leu Lys Thr Ser Arg Gly Arg Phe  
 1 5 10 15  
 Ser Ala Thr Glu Ser Leu Pro Thr Leu Glu Leu Leu Ser Gln Val Asp  
 20 25 30  
 Met Asp Cys Arg Val His Met Arg Pro Ile Gly Leu Thr Trp Val Leu  
 35 40 45  
 Gln Leu Thr Leu Ala Trp Ile Leu Leu Glu Ala Cys Gly Gly Ser Arg  
 50 55 60  
 Pro Leu Gln Ala Arg Ser Gln Gln His His Gly Leu Ala Ala Asp Leu  
 65 70 75 80  
 Gly Lys Gly Lys Leu His Leu Ala Gly Pro Cys Cys Pro Ser Glu Met

85 90 95  
 Asp Thr Thr Glu Thr Ser Gly Pro Gly Asn His Pro Glu Arg Cys Gly  
 100 105 110  
 Val Pro Ser Pro Glu Cys Glu Ser Phe Leu Glu His Leu Gln Arg Ala  
 115 120 125  
 Leu Arg Ser Arg Phe Arg Leu Arg Leu Leu Gly Val Arg Gln Ala Gln  
 130 135 140  
 Pro Leu Cys Glu Glu Leu Cys Gln Ala Trp Phe Ala Asn Cys Glu Asp  
 145 150 155 160  
 Asp Ile Thr Cys Gly Pro Thr Trp Leu Pro Leu Ser Glu Lys Arg Gly  
 165 170 175  
 Cys Glu Pro Ser Cys Leu Thr Tyr Gly Gln Thr Phe Ala Asp Gly Thr  
 180 185 190  
 Asp Leu Cys Arg Ser Ala Leu Gly His Ala Leu Pro Val Ala Ala Pro  
 195 200 205  
 Gly Ala Arg His Cys Phe Asn Ile Ser Ile Ser Ala Val Pro Arg Pro  
 210 215 220  
 Arg Pro Gly Arg Arg Gly Arg Glu Ala Pro Ser Arg Arg Ser Arg Ser  
 225 230 235 240  
 Pro Arg Thr Ser Ile Leu Asp Ala Ala Gly Ser Gly Ser Gly Ser Gly  
 245 250 255  
 Ser Gly Ser Gly Pro  
 260

&lt;210&gt; 3755

&lt;211&gt; 3149

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3755

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 aacaatacct cgataaccac gccaaactctt agtcccagcc agcagccgct tccgacagaa  
 180  
 ctgaatgtaa cttcaccgag taaagaggag tgtgggcat gcacagacac agctcatgtc  
 240  
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 420  
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 720

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2340

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 3149

<210> 3756

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3756

Met	Asn	Leu	Cys	Ser	Lys	Cys	Phe	Ala	Asp	Phe	Gln	Lys	Lys	Gln	Pro
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Asp	Asp	Asp	Ser	Ala	Pro	Ser	Thr	Ser	Asn	Ser	Gln	Ser	Asp	Leu	Phe
			20					25					30		
Ser	Glu	Glu	Thr	Thr	Ser	Asp	Asn	Asn	Asn	Thr	Ser	Ile	Thr	Thr	Pro
			35				40					45			
Thr	Leu	Ser	Pro	Ser	Gln	Gln	Pro	Leu	Pro	Thr	Glu	Leu	Asn	Val	Thr
			50				55				60				
Ser	Pro	Ser	Lys	Glu	Glu	Cys	Gly	Pro	Cys	Thr	Asp	Thr	Ala	His	Val
65					70				75					80	
Ser	Leu	Ile	Thr	Pro	Thr	Lys	Arg	Ser	Cys	Gly	Thr	Asp	Ser	Gln	Ser
			85					90						95	
Glu	Asn	Glu	Ala	Ser	Pro	Val	Lys	Arg	Pro	Arg	Leu	Leu	Glu	Asn	Thr
			100					105					110		
Glu	Arg	Ser	Glu	Glu	Thr	Ser	Arg	Ser	Lys	Gln	Lys	Ser	Arg	Arg	Arg
			115				120					125			
Cys	Phe	Gln	Cys	Gln	Thr	Lys	Leu	Glu	Leu	Val	Gln	Gln	Glu	Leu	Gly
			130			135					140				
Ser	Cys	Arg	Cys	Gly	Tyr	Val	Phe	Cys	Met	Leu	His	Arg	Leu	Pro	Glu

145		150		155		160									
Gln	His	Asp	Cys	Thr	Phe	Asp	His	Met	Gly	Arg	Gly	Arg	Glu	Glu	Ala
		165						170					175		
Ile	Met	Lys	Met	Val	Lys	Leu	Asp	Arg	Lys	Val	Gly	Arg	Ser	Cys	Gln
		180					185						190		
Arg	Ile	Gly	Glu	Gly	Cys	Ser									
	195														

&lt;210&gt; 3757

&lt;211&gt; 1046

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3757

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420
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1020
gtcagtgtgc cagccccccc tgggtg
1046

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&lt;210&gt; 3758

&lt;211&gt; 199

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3758

```

Arg Leu Ala Gly Ala Ala Ser Ser Lys Ser Cys Arg Asn Trp Arg Ala
 1           5           10           15
Ala Val Asp Leu Cys Gly Arg Leu Leu Thr Ala His Gly Gln Gly Tyr
      20           25           30
Gly Lys Ser Gly Leu Leu Thr Ser His Thr Thr Asp Ser Leu Gln Leu
      35           40           45
Trp Phe Val Arg Leu Ala Leu Leu Val Lys Leu Gly Leu Phe Gln Asn
      50           55           60
Ala Glu Met Glu Phe Glu Pro Phe Gly Asn Leu Asp Gln Pro Asp Leu
65           70           75           80
Tyr Ser Glu Tyr Tyr Pro His Val Tyr Pro Gly Arg Arg Gly Ser Met
      85           90           95
Val Pro Phe Ser Met Arg Ile Leu His Ala Glu Leu Gln Gln Tyr Leu
      100          105          110
Gly Asn Pro Gln Glu Ser Leu Asp Arg Leu His Lys Val Lys Thr Val
      115          120          125
Cys Ser Lys Val Gly Gly Ala Val Ile Leu Pro Cys His Gly Glu Asn
      130          135          140
Met Pro Ser Thr Pro Ser Pro Gln Asp Met Pro Val Leu Phe Pro Ala
145          150          155          160
Arg Pro Ala Pro Cys Thr Ile Ala Ala Ser Ala Phe Arg Arg Leu Gly
      165          170          175
Asp Pro Gly Leu Cys Gly Leu Val Val Ala Leu Ala Glu Ile Phe
      180          185          190
Phe Arg Asp Gly Lys Ser Phe
      195

```

&lt;210&gt; 3759

&lt;211&gt; 830

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3759

```

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120
agagcaaagg caggcgagcg agctcctgga aaaaattgag agcatggtgc atcagaatgg
180
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360
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420
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480
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540

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 660  
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 720  
 gcccgagaaa cccaggtgaa agctctttta acaaaggta atgatctgag aaaagaaagt  
 780  
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 830

&lt;210&gt; 3760

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3760

Glu	His	Gly	Ala	Ser	Glu	Trp	Glu	Gln	Ala	Leu	Cys	Phe	Gln	Arg	Lys
1				5				10						15	
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Cys	Asp	Arg	Glu	Leu	Tyr	Pro	Gly	Glu	Pro	Arg	Leu	His	Leu	Ser	Ala
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Pro	Gly	Pro	Ala	Ser	His	Gln	Asp	Gln	Pro	Glu	Trp	Gln	Glu	Asp	Met
	50					55				60					
Gly	Arg	Thr	Gly	Gly	Gly	Gly	Cys	Gly	His	Pro	Ser	Phe	Asn	Gln	Met
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Leu	Asp	Val	Lys	Gly	Pro	Ile	Pro	Val	Lys	Arg	Gly	Gly	Gln	Ala	Leu
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Phe	Val	Leu	Leu												
															100

&lt;210&gt; 3761

&lt;211&gt; 458

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3761

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 <213> Homo sapiens

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<210> 3764

<211> 288

<212> PRT

<213> Homo sapiens

<400> 3764

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Ser	Pro	Arg	Cys	Ala	Ala	Thr	Met	Ala	Ser	Ser	Asp	Glu	Asp	Gly	Thr
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Arg	Arg	Arg	Leu	Gly	Phe	Leu	Ala	Thr	Ala	Trp	Leu	Thr	Phe	Tyr	Asp
	65				70				75					80	
Ile	Ala	Met	Thr	Ala	Gly	Trp	Leu	Val	Leu	Ala	Ile	Ala	Met	Val	Arg
			85					90						95	
Phe	Tyr	Met	Glu	Lys	Gly	Thr	His	Arg	Gly	Leu	Tyr	Lys	Ser	Ile	Gln
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Lys	Thr	Leu	Lys	Phe	Phe	Gln	Thr	Phe	Ala	Leu	Leu	Glu	Ile	Val	His
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Cys	Leu	Ile	Gly	Ile	Val	Pro	Thr	Ser	Val	Ile	Val	Thr	Gly	Val	Gln
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Val	Ser	Ser	Arg	Ile	Phe	Met	Val	Trp	Leu	Ile	Thr	His	Ser	Ile	Lys
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Pro	Ile	Gln	Asn	Glu	Glu	Ser	Val	Val	Leu	Phe	Leu	Val	Ala	Trp	Thr
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Val	Thr	Glu	Ile	Thr	Arg	Tyr	Ser	Phe	Tyr	Thr	Phe	Ser	Leu	Leu	Asp
		180					185					190			
His	Leu	Pro	Tyr	Phe	Ile	Lys	Trp	Ala	Arg	Tyr	Asn	Phe	Phe	Ile	Ile
		195				200						205			
Leu	Tyr	Pro	Val	Gly	Val	Ala	Gly	Glu	Leu	Leu	Thr	Ile	Tyr	Ala	Ala
	210					215					220				
Leu	Pro	Tyr	Val	Lys	Lys	Thr	Gly	Met	Phe	Ser	Ile	Arg	Leu	Pro	Asn
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Lys	Tyr	Asn	Val	Ser	Phe	Asp	Tyr	Tyr	Tyr	Phe	Leu	Leu	Ile	Thr	Met

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&lt;210&gt; 3765

&lt;211&gt; 2764

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3765

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2764

&lt;210&gt; 3766

&lt;211&gt; 464

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3766

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 Cys Leu Lys Cys Lys Glu Lys Cys Glu Gly Phe Glu Leu His Phe Trp  
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 Arg Lys Ile Cys Arg Asn Cys Lys Cys Gly Gln Glu Glu His Asp Val  
 85 90 95  
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 Lys Arg Thr Gln Tyr Ser Cys Tyr Cys Cys Lys Leu Ser Met Lys Glu  
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 Gly Asp Pro Ala Ile Tyr Ala Glu Arg Ala Gly Tyr Asp Lys Leu Trp  
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 His Pro Ala Cys Phe Val Cys Ser Thr Cys His Glu Leu Leu Val Asp  
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&lt;210&gt; 3767

&lt;211&gt; 2439

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3767

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&lt;210&gt; 3768

&lt;211&gt; 379

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3768

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1

5

10

15

Asn Ala Asp Ser Val Glu Gln Ser Phe Val Gly Leu Lys Gln Leu Ile

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 Lys Leu Gly Leu Phe Gln Asn Ala Glu Met Glu Phe Glu Pro Phe Gly  
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 180 185 190  
 Tyr Ser Met Ala Asn Cys Leu Leu Leu Met Lys Asp Tyr Val Leu Ala  
 195 200 205  
 Val Glu Ala Tyr His Ser Val Ile Lys Tyr Tyr Pro Glu Gln Glu Pro  
 210 215 220  
 Gln Leu Leu Ser Gly Ile Gly Arg Ile Ser Leu Gln Ile Gly Asp Ile  
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 260 265 270  
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&lt;210&gt; 3769

&lt;211&gt; 1931

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3769

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<211> 447

<212> PRT

<213> Homo sapiens

<400> 3770

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Val	Lys	Thr	Asp	Trp	Asn	Glu	Glu	Cys	Lys	Ser	Pro	Lys	Lys	Gly	Arg	35	40	45	
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Asn	Leu	His	Gly	Asn	Ser	Glu	Val	Asn	Leu	His	Gly	Cys	Arg	Asp	Leu	85	90	95	
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Ser	Gly	Asp	Ser	Gly	Ser	Asp	Tyr	Leu	Phe	Pro	Glu	Ala	Ser	Glu	Glu	115	120	125	
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Glu	Lys	Asn	Arg	Cys	Asp	Gln	Phe	Arg	Gly	Ser	Val	Arg	Ser	Lys	Cys	165	170	175	
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Ser	Ser	Asp	Thr	Ala	Leu	Pro	Pro	Pro	Pro	Val	Pro	Pro	Lys	Ser	Glu	195	200	205	
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Pro	Ser	Glu	Ser	Thr	Pro	Val	Ser	Cys	Tyr	Pro	Cys	Asn	Arg	Val	Lys	275	280	285	
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&lt;211&gt; 1514

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3771

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&lt;210&gt; 3772

&lt;211&gt; 280

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3772

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Lys	Thr	Leu	Asp	Ser	Lys	Pro	Gly	Val	Tyr	Thr	Ser	Tyr	Lys	Pro	Tyr
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Leu	Asn	Arg	Asp	Glu	Glu	Ile	Ile	Lys	Gln	Leu	Gln	Lys	Gly	Val	Gln
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Gln	Lys	Arg	Pro	Ser	Glu	Ala	Gln	Ser	Val	Ile	Leu	Arg	Arg	Tyr	Phe
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<211> 678

<212> PRT

<213> Homo sapiens

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Ser	Lys	Val	Glu	Leu	Arg	Leu	Ser	Cys	Arg	His	Leu	Leu	Asp	Arg	Asp
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Pro	Leu	Thr	Lys	Ser	Asp	Pro	Ser	Val	Ala	Leu	Leu	Gln	Gln	Ala	Gln
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Gly	Gln	Trp	Val	Gln	Val	Gly	Arg	Thr	Glu	Val	Val	Arg	Ser	Ser	Leu
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Val	Gln	Arg	Leu	Arg	Phe	Glu	Val	Tyr	Asp	Thr	His	Gly	Pro	Ser	Gly
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Phe	Ser	Cys	Gln	Glu	Asp	Phe	Leu	Gly	Gly	Met	Glu	Cys	Thr	Leu	
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Val	Asp	Val	Leu	Gly	Pro	Ala	Gly	His	Cys	Ala	Lys	His	Phe	Leu	Cys
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Cys	Thr	Glu	Ser	Ser	His	Leu	Ala	Arg	Thr	Gly	Pro	Ser	Phe	Leu	Leu
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Arg	Tyr	Asp	Asp	Leu	Cys	Leu	Pro	Trp	Ala	Thr	Ala	Gly	Ala	Val	Arg
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Gln	Lys	Lys	Val	Thr	Arg	Pro	Leu	Leu	Leu	Lys	Phe	Gly	Arg	Asn	Ala
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Gly	Lys	Ser	Thr	Ile	Thr	Val	Ile	Ala	Glu	Asp	Ile	Ser	Gly	Asn	Asn
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Ser	Cys	Asp	Val	His	Arg	Pro	Leu	Lys	Phe	Leu	Val	Trp	Asp	Tyr	Asp
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Ser	Ser	Gly	Lys	His	Asp	Phe	Ile	Gly	Glu	Phe	Thr	Ser	Thr	Phe	Gln

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Leu Asp Tyr Ile Met Gly Gly Cys Gln Ile Ser Phe Thr Val Ala Ile
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Tyr Ile Ser Pro Arg Gln Pro Asn His Tyr Leu Gln Ala Leu Arg Ala
      450      455      460
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465      470      475      480
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&lt;210&gt; 3775

&lt;211&gt; 549

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3775

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<211> 183

<212> PRT

<213> Homo sapiens

<400> 3776

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			20					25					30		
Pro	Met	Glu	Gln	Asn	Val	Ala	Glu	Leu	Leu	Gln	Phe	Leu	Leu	Val	Lys
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<211> 4915

<212> DNA

<213> Homo sapiens

<400> 3777

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 930 935 940  
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&lt;210&gt; 3779

&lt;211&gt; 1853

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3779

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&lt;210&gt; 3780

&lt;211&gt; 530

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3780

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&lt;213&gt; Homo sapiens

&lt;400&gt; 3781

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<400> 3782  
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 Cys Thr Gly Gly Asp Ser Tyr His Pro His Glu Gln Ser Ser Pro Pro  
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<211> 804

<212> PRT

<213> Homo sapiens

<400> 3784

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Leu	Leu	Glu	Arg	Val	Glu	Glu	Pro	Val	Leu	Gln	Asn	Gln	Ile	Arg	Glu
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His	Val	Ile	Ala	Ile	Glu	Asp	Ala	Phe	Val	Asn	Ser	Gln	Glu	Trp	Thr
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Pro	Glu	Ala	Gln	Phe	Ala	Met	Trp	Val	Asp	Ala	Val	Ile	Phe	Val	Phe
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2931

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His Leu Ala Cys Arg Lys Gly Asn Val Val Leu Ala Gln Leu Leu Ile		
725	730	735
Trp Tyr Gly Val Asp Val Thr Ala Arg Asp Ala His Gly Asn Thr Ala		
740	745	750
Leu Ala Tyr Ala Arg Gln Ala Ser Ser Gln Glu Cys Ile Asp Val Leu		
755	760	765
Leu Gln Tyr Gly Cys Pro Asp Glu Arg Phe Val Leu Met Ala Thr Pro		
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&lt;210&gt; 3785

&lt;211&gt; 1901

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3785

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&lt;210&gt; 3786

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3786

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 Ala Pro Gln Ser Ile Pro Arg Ser Ala Ser Tyr Pro Cys Ala Ala Pro  
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 Arg Pro Gly Ala Pro Glu Thr Thr Ala Leu His Gly Gly Phe Gln Arg

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Ala Ser Arg His Pro Glu Pro Val Pro Glu Glu Gly Ser Glu Asp Glu
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Leu Pro Pro Gln Val His Lys Val
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&lt;210&gt; 3787

&lt;211&gt; 717

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3787

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&lt;210&gt; 3788

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3788

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Cys Ala Ser Ile Lys Leu Arg His Gly Ser Arg Ala Ala Pro Pro Gly
      20      25      30
Pro Trp Gly Ala Lys Cys Ser Trp Arg Gln Val Ala Lys Gly Glu His
      35      40      45
Leu Gly Gln Thr Pro Gly Phe Ser Ser Arg Leu Pro His Leu Pro Ala

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Ala	Ala	Val	Ile	Thr	His	Glu	Gln	Cys	Leu	Ala	Gln	Ser	Gly	Arg	Ser	
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<210> 3789
<211> 4341
<212> DNA
<213> Homo sapiens
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<210> 3790  
 <211> 1092  
 <212> PRT  
 <213> Homo sapiens

<400> 3790  
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 Leu Gln Val Leu Lys Ala Gln Ser Glu Asp Pro Leu Pro Glu Leu His  
 35 40 45  
 Glu Asp Leu His Asn Glu Lys Glu Leu Ile Lys Glu Leu Glu Gln Ser  
 50 55 60  
 Leu Ala Ser Trp Thr Gln Asn Leu Lys Glu Leu Gln Thr Met Lys Ala  
 65 70 75 80  
 Asp Leu Thr Arg His Val Leu Val Glu Asp Val Met Val Leu Lys Glu  
 85 90 95  
 Gln Ile Glu His Leu His Arg Gln Trp Glu Asp Leu Cys Leu Arg Val  
 100 105 110  
 Ala Ile Arg Lys Gln Glu Ile Glu Asp Arg Leu Asn Thr Trp Val Val  
 115 120 125  
 Phe Asn Glu Lys Asn Lys Glu Leu Cys Ala Trp Leu Val Gln Met Glu  
 130 135 140  
 Asn Lys Val Leu Gln Thr Val Asp Ile Ser Ile Glu Glu Met Ile Glu  
 145 150 155 160  
 Lys Leu Gln Lys Asp Cys Met Glu Glu Ile Asn Leu Phe Ser Glu Asn  
 165 170 175  
 Lys Leu Gln Leu Lys Gln Met Gly Asp Gln Leu Ile Lys Ala Ser Asn  
 180 185 190  
 Lys Ser Arg Ala Ala Glu Ile Asp Asp Lys Leu Asn Lys Ile Asn Asp  
 195 200 205  
 Arg Trp Gln His Leu Phe Asp Val Ile Gly Ser Arg Val Lys Lys Leu  
 210 215 220  
 Lys Glu Thr Phe Ala Phe Ile Gln Gln Leu Asp Lys Asn Met Ser Asn  
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 Val Tyr Asp Val Cys Asp Asp Gln Glu Ile Gln Lys Arg Leu Ala Glu  
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 Ser Val Phe Asn Ile Cys Asp Val Leu Leu His Asp Ser Asp Ala Cys  
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 Ala Asn Glu Thr Glu Cys Asp Ser Ile Gln Gln Thr Thr Arg Ser Leu  
 305 310 315 320  
 Asp Arg Arg Trp Arg Asn Ile Cys Ala Met Ser Met Glu Arg Arg Met  
 325 330 335  
 Lys Ile Glu Glu Thr Trp Arg Leu Trp Gln Lys Phe Leu Asp Asp Tyr  
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 Ser Arg Phe Glu Asp Trp Leu Lys Ser Ala Glu Arg Thr Ala Ala Cys  
 355 360 365  
 Pro Asn Ser Ser Glu Val Leu Tyr Thr Ser Ala Lys Glu Glu Leu Lys

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      405      410      415
Asp Thr Ala Ser Arg Leu Lys Gln Met Val His Glu Gly Asn Gln Arg
      420      425      430
Trp Asp Asn Leu Gln Arg Arg Val Thr Ala Val Leu Arg Arg Leu Arg
      435      440      445
His Phe Thr Asn Gln Arg Glu Glu Phe Glu Gly Thr Arg Glu Ser Ile
      450      455      460
Leu Val Trp Leu Thr Glu Met Asp Leu Gln Leu Thr Asn Val Glu His
465      470      475      480
Phe Ser Glu Ser Asp Ala Asp Asp Lys Met Arg Gln Leu Asn Gly Phe
      485      490      495
Gln Gln Glu Ile Thr Leu Asn Thr Asn Lys Ile Asp Gln Leu Ile Val
      500      505      510
Phe Gly Glu Gln Leu Ile Gln Lys Ser Glu Pro Leu Asp Ala Val Leu
      515      520      525
Ile Glu Asp Glu Leu Glu Glu Leu His Arg Tyr Cys Gln Glu Val Phe
      530      535      540
Gly Arg Val Ser Arg Phe His Arg Arg Leu Thr Ser Cys Thr Pro Gly
545      550      555      560
Leu Glu Asp Glu Lys Glu Ala Ser Glu Asn Glu Thr Asp Met Glu Asp
      565      570      575
Pro Arg Glu Ile Gln Thr Asp Ser Trp Arg Lys Arg Gly Glu Ser Glu
      580      585      590
Glu Pro Ser Ser Pro Gln Ser Leu Cys His Leu Val Ala Pro Gly His
      595      600      605
Glu Arg Ser Gly Cys Glu Thr Pro Val Ser Val Asp Ser Ile Pro Leu
      610      615      620
Glu Trp Asp His Thr Gly Asp Val Gly Gly Ser Ser Ser His Glu Glu
625      630      635      640
Asp Glu Glu Gly Pro Tyr Tyr Ser Ala Leu Ser Gly Lys Ser Ile Ser
      645      650      655
Asp Gly His Ser Trp His Val Pro Asp Ser Pro Ser Cys Pro Glu His
      660      665      670
His Tyr Lys Gln Met Glu Gly Asp Arg Asn Val Pro Pro Val Pro Pro
      675      680      685
Ala Ser Ser Thr Pro Tyr Lys Pro Pro Tyr Gly Lys Leu Leu Leu Pro
      690      695      700
Pro Gly Thr Asp Gly Gly Lys Glu Gly Pro Arg Val Leu Asn Gly Asn
705      710      715      720
Pro Gln Gln Glu Asp Gly Gly Leu Ala Gly Ile Thr Glu Gln Gln Ser
      725      730      735
Gly Ala Phe Asp Arg Trp Glu Met Ile Gln Ala Gln Glu Leu His Asn
      740      745      750
Lys Leu Lys Ile Lys Gln Asn Leu Gln Gln Leu Asn Ser Asp Ile Ser
      755      760      765
Ala Ile Thr Thr Trp Leu Lys Lys Thr Glu Ala Glu Leu Glu Met Leu
      770      775      780
Lys Met Ala Lys Pro Pro Ser Asp Ile Gln Glu Ile Glu Leu Arg Val
785      790      795      800
Lys Arg Leu Gln Glu Ile Leu Lys Ala Phe Asp Thr Tyr Lys Ala Leu

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<210> 3791
<211> 1011
<212> DNA
<213> Homo sapiens
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180
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300
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 420  
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 720  
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 780  
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&lt;210&gt; 3792

&lt;211&gt; 288

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3792

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			20					25					30		
Ala	Leu	Ser	Met	Gly	Gly	Lys	Val	Pro	Val	Ser	Glu	Gly	Leu	Glu	His
		35				40						45			
Ser	Asp	Leu	Pro	Asp	Gly	Thr	Gly	Glu	Phe	Leu	Asp	Ala	Trp	Leu	Met
	50					55					60				
Leu	Val	Glu	Lys	Met	Val	Asn	Pro	Thr	Thr	Val	Leu	Glu	Ser	Pro	His
65					70					75				80	
Ser	Leu	Pro	Ala	Lys	Leu	Pro	Gly	Gly	Val	Gln	Asn	Phe	Pro	Gln	Phe
			85					90						95	
Ser	Ala	Leu	Arg	Phe	Leu	Val	Val	Thr	Gln	Lys	Ala	Ala	Phe	Thr	Cys
			100					105					110		
Ile	Lys	Asn	Leu	Trp	Asn	Arg	Lys	Pro	Leu	Lys	Val	Tyr	Gly	Gly	Arg
		115				120						125			
Met	Ala	Glu	Ser	Met	Leu	Ala	Ile	Leu	Cys	His	Ile	Leu	Arg	Gly	Glu
	130					135					140				
Pro	Val	Ile	Arg	Glu	Arg	Leu	Ser	Lys	Glu	Lys	Glu	Gly	Ser	Arg	Gly
145					150					155				160	
Glu	Glu	Asp	Thr	Gly	Gln	Glu	Glu	Gly	Gly	Ser	Arg	Arg	Glu	Pro	Gln
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<210> 3795
<211> 1341
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3795

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&lt;210&gt; 3796

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3796

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Pro Asn Gln Leu Tyr Tyr Glu Gly Glu Leu Gln Ala Cys Ala Asp Val
      35           40           45
Val Asp Arg Glu Arg Phe Cys Arg Trp Ala Gly Leu Pro Arg Gln Gly
      50           55           60
Phe Pro Ile Ile Phe His Gly Val Met Gly Lys Asp Glu Arg Glu Gly
65           70           75           80
Asn Ser Pro Ser Phe Asn Pro Glu Glu Ala Ala Thr Val Thr Ser
      85           90           95
Tyr Leu Lys Leu Leu Leu Ala Pro Ser Ser Lys Lys Gly Lys Ala Arg
      100          105          110
Leu Ser Pro Arg Ser Val Gly Val Ile Ser Pro Tyr Arg Lys Gln Val
      115          120          125
Glu Lys Ile Arg Tyr Cys Ile Thr Lys Leu Asp Arg Glu Leu Arg Gly
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Leu Asp Asp Ile Lys Asp Leu Lys Val Gly Ser Val Glu Glu Phe Gln
145          150          155          160
Gly Gln Glu Arg Ser Val Ile Leu Ile Ser Thr Val Arg Ser Ser Gln
      165          170          175
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      180          185          190
Pro Lys Arg Phe Asn Val Ala Val Thr Arg Ala Lys Ala Leu Leu Ile
      195          200          205
Ile Val Gly Asn Pro Leu Leu Leu Gly His Asp Pro Asp Trp Lys Val
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Phe Leu Glu Phe Cys Lys Glu Asn Gly Gly Tyr Thr Gly Cys Pro Phe
225          230          235          240
Pro Ala Lys Leu Asp Leu Gln Gln Gly Gln Asn Leu Leu Gln Gly Leu
      245          250          255
Ser Lys Leu Ser Pro Ser Thr Ser Gly Pro His Ser His Asp Tyr Leu
      260          265          270
Pro Gln Glu Arg Glu Gly Glu Gly Gly Leu Ser Leu Gln Val Glu Pro
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&lt;210&gt; 3797

&lt;211&gt; 1970

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3797

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 1970

<210> 3798

<211> 473

<212> PRT

<213> Homo sapiens

<400> 3798

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Val	Ile	Leu	Phe	Gly	Val	Phe	Val	Arg	Tyr	Asp	Phe	Glu	Ala	Asp	Ala
		20						25				30			
His	Trp	Trp	Ser	Glu	Arg	Thr	His	Lys	Asn	Leu	Ser	Asp	Met	Glu	Asn
		35					40					45			
Glu	Phe	Tyr	Tyr	Arg	Tyr	Pro	Ser	Phe	Gln	Asp	Val	His	Val	Met	Val
		50				55					60				
Phe	Val	Gly	Phe	Gly	Phe	Leu	Met	Thr	Phe	Leu	Gln	Arg	Tyr	Gly	Phe
65					70					75				80	
Ser	Ala	Val	Gly	Phe	Asn	Phe	Leu	Leu	Ala	Ala	Phe	Gly	Ile	Gln	Trp
				85					90					95	
Ala	Leu	Leu	Met	Gln	Gly	Trp	Phe	His	Phe	Leu	Gln	Asp	Arg	Tyr	Ile
			100					105					110		
Val	Val	Gly	Val	Glu	Asn	Leu	Ile	Asn	Ala	Asp	Phe	Cys	Val	Ala	Ser
		115					120					125			
Val	Cys	Val	Ala	Phe	Gly	Ala	Val	Leu	Gly	Lys	Val	Ser	Pro	Ile	Gln
		130				135						140			
Leu	Leu	Ile	Met	Thr	Phe	Phe	Gln	Val	Thr	Leu	Phe	Ala	Val	Asn	Glu
145					150					155				160	
Phe	Ile	Leu	Leu	Asn	Leu	Leu	Lys	Val	Lys	Asp	Ala	Gly	Gly	Ser	Met
				165					170					175	
Thr	Ile	His	Thr	Phe	Gly	Ala	Tyr	Phe	Gly	Leu	Thr	Val	Thr	Arg	Ile
		180						185					190		
Leu	Tyr	Arg	Arg	Asn	Leu	Glu	Gln	Ser	Lys	Glu	Arg	Gln	Asn	Ser	Val
		195					200					205			
Tyr	Gln	Ser	Asp	Leu	Phe	Ala	Met	Ile	Gly	Thr	Leu	Phe	Leu	Trp	Met
		210				215					220				
Tyr	Trp	Pro	Ser	Phe	Asn	Ser	Ala	Ile	Ser	Tyr	His	Gly	Asp	Ser	Gln
225					230					235				240	
His	Arg	Ala	Ala	Ile	Asn	Thr	Tyr	Cys	Ser	Leu	Ala	Ala	Cys	Val	Leu
				245					250					255	
Thr	Ser	Val	Ala	Ile	Ser	Ser	Ala	Leu	His	Lys	Lys	Gly	Lys	Leu	Asp
			260					265					270		
Met	Val	His	Ile	Gln	Asn	Ala	Thr	Leu	Ala	Gly	Gly	Val	Ala	Val	Gly
		275					280					285			
Thr	Ala	Ala	Glu	Met	Met	Leu	Met	Pro	Tyr	Gly	Ala	Leu	Ile	Ile	Gly
		290				295					300				
Phe	Val	Cys	Gly	Ile	Ile	Ser	Thr	Leu	Gly	Phe	Val	Tyr	Leu	Thr	Pro
305					310					315				320	
Phe	Leu	Glu	Ser	Arg	Leu	His	Ile	Gln	Asp	Thr	Cys	Gly	Ile	Asn	Asn

```

          325          330          335
Leu His Gly Ile Pro Gly Ile Ile Gly Gly Ile Val Gly Ala Val Thr
          340          345          350
Ala Ala Ser Ala Ser Leu Glu Val Tyr Gly Lys Glu Gly Leu Val His
          355          360          365
Ser Phe Asp Phe Gln Gly Phe Asn Gly Asp Trp Thr Ala Arg Thr Gln
          370          375          380
Gly Lys Phe Gln Ile Tyr Gly Leu Leu Val Thr Leu Ala Met Ala Leu
          385          390          395          400
Met Gly Gly Ile Ile Val Gly Leu Ile Leu Arg Leu Pro Phe Trp Gly
          405          410          415
Gln Pro Ser Asp Glu Asn Cys Phe Glu Asp Ala Val Tyr Trp Glu Met
          420          425          430
Pro Glu Gly Asn Ser Thr Val Tyr Ile Pro Glu Asp Pro Thr Phe Lys
          435          440          445
Pro Ser Gly Pro Ser Val Pro Ser Val Pro Met Val Ser Pro Leu Pro
          450          455          460
Met Ala Ser Ser Val Pro Leu Val Pro
          465          470

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&lt;210&gt; 3799

&lt;211&gt; 210

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3799

```

tcgaggaact gctcggcctc cacatcccaa gcctcacctt ctccttgcac cacagagaga
60
agcaagcaga aggcccggag gagaacaaga tccagctcct ctcctctctc ttccagttct
120
tctagctcct cttcttctct ctcgtcctcc tcctcttctc ccagtgatgg ccggaagaag
180
cgggggaagt acaaggacaa gaggaggaag
210

```

&lt;210&gt; 3800

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3800

```

Ser Arg Asn Cys Ser Ala Ser Thr Ser Gln Ala Ser Pro Ser Pro Cys
1      5      10      15
Ile Thr Glu Arg Ser Lys Gln Lys Ala Arg Arg Arg Thr Arg Ser Ser
20     25     30
Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser
35     40     45
Ser Ser Ser Ser Ser Ser Ser Asp Gly Arg Lys Lys Arg Gly Lys Tyr
50     55     60
Lys Asp Lys Arg Arg Lys
65     70

```

&lt;210&gt; 3801

&lt;211&gt; 4070

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3801

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60  
gctggggcgc gggcagcgtc gcctcacgcg gagcagagct gagctgaagc gggacccgga  
120  
gcccagcag ccgcccgcct ggcaatcaaa tttctggaag tcatcaagcc cttctgtgtc  
180  
atcctgcccg aaattcagaa gccagagagg aagattcagt ttaaggagaa agtgcgtgtg  
240  
accgctatca ccctctttat cttcttagtg tgctgccaga tccccctgtt tgggatcatg  
300  
tcttcagatt cagctgacct tttctattgg atgagagtga ttctagcctc taacagaggg  
360  
acattgatgg agctagggat ctctcctatt gtcacgtctg gccttataat gcaactcttg  
420  
gctggcgcca agataattga agttggtgac accccaaaag accgagctct cttcaacgga  
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600  
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720  
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2100  
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 4070

&lt;210&gt; 3802

&lt;211&gt; 476

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3802

Met	Ala	Ile	Lys	Phe	Leu	Glu	Val	Ile	Lys	Pro	Phe	Cys	Val	Ile	Leu
1				5					10					15	
Pro	Glu	Ile	Gln	Lys	Pro	Glu	Arg	Lys	Ile	Gln	Phe	Lys	Glu	Lys	Val
			20					25					30		
Leu	Trp	Thr	Ala	Ile	Thr	Leu	Phe	Ile	Phe	Leu	Val	Cys	Cys	Gln	Ile
	35					40						45			
Pro	Leu	Phe	Gly	Ile	Met	Ser	Ser	Asp	Ser	Ala	Asp	Pro	Phe	Tyr	Trp
	50					55					60				
Met	Arg	Val	Ile	Leu	Ala	Ser	Asn	Arg	Gly	Thr	Leu	Met	Glu	Leu	Gly
65				70					75					80	
Ile	Ser	Pro	Ile	Val	Thr	Ser	Gly	Leu	Ile	Met	Gln	Leu	Leu	Ala	Gly
			85					90						95	
Ala	Lys	Ile	Ile	Glu	Val	Gly	Asp	Thr	Pro	Lys	Asp	Arg	Ala	Leu	Phe
			100					105					110		
Asn	Gly	Ala	Gln	Lys	Leu	Phe	Gly	Met	Ile	Ile	Thr	Ile	Gly	Gln	Ser

```

      115      120      125
Ile Val Tyr Val Met Thr Gly Met Tyr Gly Asp Pro Ser Glu Met Gly
      130      135      140
Ala Gly Ile Cys Leu Leu Ile Ile Ile Gln Leu Phe Val Ala Gly Leu
145      150      155      160
Ile Val Leu Leu Leu Asp Glu Leu Leu Gln Lys Gly Tyr Gly Leu Gly
      165      170      175
Ser Gly Ile Ser Leu Phe Ile Ala Thr Asn Ile Cys Glu Thr Ile Val
      180      185      190
Trp Lys Ala Phe Ser Pro Thr Thr Ile Asn Thr Gly Arg Gly Thr Glu
195      200      205
Phe Glu Gly Ala Val Ile Ala Leu Phe His Leu Leu Ala Thr Arg Thr
210      215      220
Asp Lys Val Arg Ala Leu Arg Glu Ala Phe Tyr Arg Gln Asn Leu Pro
225      230      235      240
Asn Leu Met Asn Leu Ile Ala Thr Ile Phe Val Phe Ala Val Val Ile
      245      250      255
Tyr Phe Gln Gly Phe Arg Val Asp Leu Pro Ile Lys Ser Ala Arg Tyr
      260      265      270
Arg Gly Gln Tyr Asn Thr Tyr Pro Ile Lys Leu Phe Tyr Thr Ser Asn
275      280      285
Ile Pro Ile Ile Leu Gln Ser Ala Leu Val Ser Asn Leu Tyr Val Ile
290      295      300
Ser Gln Met Leu Ser Ala Arg Phe Ser Gly Asn Phe Leu Val Asn Leu
305      310      315      320
Leu Gly Gln Trp Ser Asp Thr Ser Ser Gly Gly Pro Ala Arg Ala Tyr
      325      330      335
Pro Val Gly Gly Leu Cys Tyr Tyr Leu Ser Pro Pro Glu Ser Phe Gly
      340      345      350
Ser Val Leu Glu Asp Pro Val His Ala Val Val Tyr Ile Val Phe Met
355      360      365
Leu Gly Ser Cys Ala Phe Phe Ser Lys Thr Trp Ile Glu Val Ser Gly
370      375      380
Ser Ser Ala Lys Asp Val Ala Lys Gln Leu Lys Glu Gln Gln Met Val
385      390      395      400
Met Arg Gly His Arg Glu Thr Ser Met Val His Glu Leu Asn Arg Tyr
      405      410      415
Ile Pro Thr Ala Ala Ala Phe Gly Gly Leu Cys Ile Gly Ala Leu Ser
420      425      430
Val Leu Ala Asp Phe Leu Gly Ala Ile Gly Ser Gly Thr Gly Ile Leu
435      440      445
Leu Ala Val Thr Ile Ile Tyr Gln Tyr Phe Glu Ile Phe Val Lys Glu
450      455      460
Gln Ser Glu Val Gly Ser Met Gly Ala Leu Leu Phe
465      470      475

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&lt;210&gt; 3803

&lt;211&gt; 345

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3803

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60

ggcaaaggat caatgagaga taaagctaag gaagaagaac taaggaagag tggggaagcc  
 120  
 aaatatgccc acttgagtga tgagcttcat gtattaattg aagtgtttgc tccacctggg  
 180  
 gaagcttatt cacgtatgag tcatgcattg gaagagatta aaaaattcct ggttcctgac  
 240  
 tacaatgatg aaattcgtca ggaacaacta cgtgaattat cttacttaaa tggctcagag  
 300  
 gactctgggc gtggcagagg tattagaggc agagggatcc ggatt  
 345

<210> 3804

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3804

Pro	Arg	Gly	Asn	Ser	Leu	Lys	Arg	Leu	Gln	Glu	Glu	Thr	Gly	Ala	Lys
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Met	Ser	Ile	Leu	Gly	Lys	Gly	Ser	Met	Arg	Asp	Lys	Ala	Lys	Glu	Glu
			20					25					30		
Glu	Leu	Arg	Lys	Ser	Gly	Glu	Ala	Lys	Tyr	Ala	His	Leu	Ser	Asp	Glu
			35				40					45			
Leu	His	Val	Leu	Ile	Glu	Val	Phe	Ala	Pro	Pro	Gly	Glu	Ala	Tyr	Ser
			50			55					60				
Arg	Met	Ser	His	Ala	Leu	Glu	Glu	Ile	Lys	Lys	Phe	Leu	Val	Pro	Asp
65					70					75				80	
Tyr	Asn	Asp	Glu	Ile	Arg	Gln	Glu	Gln	Leu	Arg	Glu	Leu	Ser	Tyr	Leu
			85					90						95	
Asn	Gly	Ser	Glu	Asp	Ser	Gly	Arg	Gly	Arg	Gly	Ile	Arg	Gly	Arg	Gly
			100					105						110	
Ile	Arg	Ile													
			115												

<210> 3805

<211> 1923

<212> DNA

<213> Homo sapiens

<400> 3805

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 aagagcccgt tgcctaccag atgccaggcc ctgtgcttcc tctgccttt gaggttttgg  
 180  
 cttgtgatca accaggaggg aaacatggtt actgctcgcc aggaacctcg cctggctcctg  
 240  
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 300  
 ctactgccta tcaaaacgcc caccacaaat gcagtgcaca agtgcagagt gcacggcctg  
 360  
 gagatagagg gcagggactg tggcgaggcc gccgccaggt ggataaccag cttcctgaag  
 420

tcacagccct accgcctggt gcacttcgag cctcacatgc gaccgagacg tcctcatcaa  
480  
atagcagact tgttccgacc caaggaccag attgcttact cagacaccag ccattcttg  
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accaacttca ggccaatat tgtaatttca ggatgcgatg tctatgcaga ggattcttg  
660  
gatgagcttc ttattggtga cgtggaactg aaaagggatg tggcttggtc cagatgcatt  
720  
ttaaccacag tggaccacaga caccgggtgc atgagcagga aggaaccgct ggaaacactg  
780  
aagagttatc gccagtgtga cccttcagaa cgaaagtat atggaaaac accactctt  
840  
gggcagtatt ttgtgctgga aaaccaggg accatcaaag tgggagaccc tgtgtacctg  
900  
ctgggccagt aatgggaacc gtatgtcctg gaattattaga tgccttttaa aaatgttctc  
960  
aaaaatgaca acacttgaag catggtgtt cagaactgag acctctacat tttctttaa  
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1800  
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1860  
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1920  
aaa  
1923

&lt;210&gt; 3806

&lt;211&gt; 280

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3806

```

Thr Pro Cys Pro Val Asn Asn Ile Ser Asn Ser Pro Ala Ile Ser Thr
 1           5           10          15
Asp Lys Ser Pro Leu Pro Thr Arg Cys Gln Ala Leu Cys Phe Leu Leu
          20          25          30
Pro Leu Arg Phe Trp Leu Val Ile Asn Gln Glu Gly Asn Met Val Thr
          35          40          45
Ala Arg Gln Glu Pro Arg Leu Val Leu Ile Ser Leu Thr Cys Asp Gly
          50          55          60
Asp Thr Leu Thr Leu Ser Ala Ala Tyr Thr Lys Asp Leu Leu Leu Pro
65          70          75          80
Ile Lys Thr Pro Thr Thr Asn Ala Val His Lys Cys Arg Val His Gly
          85          90          95
Leu Glu Ile Glu Gly Arg Asp Cys Gly Glu Ala Ala Ala Gln Trp Ile
          100         105         110
Thr Ser Phe Leu Lys Ser Gln Pro Tyr Arg Leu Val His Phe Glu Pro
          115         120         125
His Met Arg Pro Arg Arg Pro His Gln Ile Ala Asp Leu Phe Arg Pro
          130         135         140
Lys Asp Gln Ile Ala Tyr Ser Asp Thr Ser Pro Phe Leu Ile Leu Ser
145         150         155         160
Glu Ala Ser Leu Ala Asp Leu Asn Ser Arg Leu Glu Lys Lys Val Lys
          165         170         175
Ala Thr Asn Phe Arg Pro Asn Ile Val Ile Ser Gly Cys Asp Val Tyr
          180         185         190
Ala Glu Asp Ser Trp Asp Glu Leu Leu Ile Gly Asp Val Glu Leu Lys
          195         200         205
Arg Val Met Ala Cys Ser Arg Cys Ile Leu Thr Thr Val Asp Pro Asp
          210         215         220
Thr Gly Val Met Ser Arg Lys Glu Pro Leu Glu Thr Leu Lys Ser Tyr
225         230         235         240
Arg Gln Cys Asp Pro Ser Glu Arg Lys Leu Tyr Gly Lys Ser Pro Leu
          245         250         255
Phe Gly Gln Tyr Phe Val Leu Glu Asn Pro Gly Thr Ile Lys Val Gly
          260         265         270
Asp Pro Val Tyr Leu Leu Gly Gln
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&lt;210&gt; 3807

&lt;211&gt; 372

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3807

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120
caggagggtc gcttcccggg gctcagctac caccgggtc ccagcggcag agggagcgcg
180

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<210> 3808

<211> 85

<212> PRT

<213> Homo sapiens

<400> 3808

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			20					25				30			
Leu	Ala	Arg	Ser	Ala	Arg	Phe	Arg	Gln	Gly	Gly	Arg	Phe	Pro	Val	Leu
		35				40					45				
Ser	Tyr	His	Pro	Ala	Pro	Ser	Gly	Arg	Gly	Ser	Ala	Pro	Ser	Pro	Arg
	50				55					60					
Ser	Ala	Pro	Gly	Trp	Leu	Arg	Pro	Phe	Trp	Ala	Phe	Ser	Phe	Trp	Pro
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<210> 3809

<211> 1221

<212> DNA

<213> Homo sapiens

<400> 3809

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 120  
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 180  
 tggtagacac ttctccttct tttcatctgg tatcatgtat catctctcag atccaataag  
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 360  
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 420  
 aagggaattct ccaggaaggt aggcaggcct cctacaccat cccgcagggt atacaggggg  
 480  
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 540  
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 660  
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 720  
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 1080  
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 1140  
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<210> 3810

<211> 97

<212> PRT

<213> Homo sapiens

<400> 3810

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Ser	Trp	Arg	Ala	Ser	Ser	Asn	Cys	Ser	Arg	Ala	Glu	Pro	Ile	Lys	Glu
			20					25					30		
Phe	Ser	Arg	Lys	Val	Gly	Arg	Pro	Thr	Pro	Ser	Arg	Arg	Val	Tyr	
		35				40					45				
Arg	Gly	Thr	Arg	Thr	Arg	Pro	Ser	Thr	Ser	Ser	Pro	Trp	Ser	Leu	Ala
	50				55					60					
Arg	Val	Ala	Pro	Ala	Ser	Thr	Ala	Asn	Ser	Ser	Ser	Ser	Ser	Asp	Ala
	65			70					75					80	
Trp	His	Arg	Ser	Ala	Thr	Thr	Arg	Gly	Pro	Asp	Pro	Thr	Trp	Glu	Leu
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Arg

<210> 3811

<211> 296

<212> DNA

<213> Homo sapiens

<400> 3811

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 120

acaccacgcc agatatctgg gcagcagga catctgacct ggggtgcttg ctggcagcac  
 180  
 tgcttgaca gcaggcctc cttagggcca cctcccaacc cagctaggga gcgtcttaag  
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<210> 3812

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3812

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Pro	Val	Leu	Lys	Ala	Gln	Asn	Cys	Arg	Pro	Ser	Gly	Arg	Pro	Val	Leu
		20					25					30			
Pro	Tyr	Gln	Arg	Thr	Pro	Arg	Gln	Ile	Ser	Gly	Gln	Gln	Gly	His	Leu
	35					40					45				
Thr	Trp	Gly	Ala	Cys	Trp	Gln	His	Cys	Leu	Asp	Ser	Arg	Ala	Ser	Leu
	50					55				60					
Gly	Pro	Pro	Pro	Asn	Pro	Ala	Arg	Glu	Arg	Leu	Lys	Ala	Cys	Pro	Pro
65				70				75					80		
Cys	Trp	Ala	Trp	Val	Gly	Arg	Ser	Gly	Thr	Gly	Pro	Ser	Arg		
			85					90							

<210> 3813

<211> 1419

<212> DNA

<213> Homo sapiens

<400> 3813

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 120  
 gactcactga gtgcccgccg cacactgcac accttcgac tgcttggtt cgggcgaagc  
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 240  
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 660

cctatgctgg agcgaattca cttgattcga aaagatgtgc ctatcactat gatctacggg  
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&lt;210&gt; 3814

&lt;211&gt; 294

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3814

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Gln	Asn	Asp	Arg	Thr	Pro	Leu	Val	Met	Val	His	Gly	Phe	Gly	Gly	Gly
		20						25					30		
Val	Gly	Leu	Trp	Ile	Leu	Asn	Met	Asp	Ser	Leu	Ser	Ala	Arg	Arg	Thr
		35					40					45			
Leu	His	Thr	Phe	Asp	Leu	Leu	Gly	Phe	Gly	Arg	Ser	Ser	Arg	Pro	Ala
	50					55				60					
Phe	Pro	Arg	Asp	Pro	Glu	Gly	Ala	Glu	Asp	Glu	Phe	Val	Thr	Ser	Ile
65					70				75					80	
Glu	Thr	Trp	Arg	Glu	Thr	Met	Gly	Ile	Pro	Ser	Met	Ile	Leu	Leu	Gly
			85					90					95		
His	Ser	Leu	Gly	Gly	Phe	Leu	Ala	Thr	Ser	Tyr	Ser	Ile	Lys	Tyr	Pro
		100					105						110		
Asp	Arg	Val	Lys	His	Leu	Ile	Leu	Val	Asp	Pro	Trp	Gly	Phe	Pro	Leu
		115				120					125				
Arg	Pro	Thr	Asn	Pro	Ser	Glu	Ile	Arg	Ala	Pro	Pro	Ala	Trp	Val	Lys
	130					135				140					
Ala	Val	Ala	Ser	Val	Leu	Gly	Arg	Ser	Asn	Pro	Leu	Ala	Val	Leu	Arg
145					150				155					160	
Val	Ala	Gly	Pro	Trp	Gly	Pro	Gly	Leu	Val	Gln	Arg	Phe	Arg	Pro	Asp

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Phe Lys Arg Lys Phe Ala Asp Phe Phe Glu Asp Asp Thr Ile Ser Glu
          180          185          190
Tyr Ile Tyr His Cys Asn Ala Gln Asn Pro Ser Gly Glu Thr Ala Phe
          195          200          205
Lys Ala Met Met Glu Ser Phe Gly Trp Ala Arg Arg Pro Met Leu Glu
          210          215          220
Arg Ile His Leu Ile Arg Lys Asp Val Pro Ile Thr Met Ile Tyr Gly
225          230          235          240
Ser Asp Thr Trp Ile Asp Thr Ser Thr Gly Lys Lys Val Lys Met Gln
          245          250          255
Arg Pro Asp Ser Tyr Val Arg Asp Met Glu Ile Lys Gly Ala Ser His
          260          265          270
His Val Tyr Ala Asp Gln Pro His Ile Phe Asn Ala Val Val Glu Glu
          275          280          285
Ile Cys Asp Ser Val Asp
          290

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&lt;210&gt; 3815

&lt;211&gt; 3669

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3815

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900

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&lt;210&gt; 3816

&lt;211&gt; 707

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3816

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Lys	Tyr	Asp	Pro	Thr	Phe	Lys	Gly	Pro	Ile	Tyr	Asn	Arg	Gly	Cys	Thr
			20					25				30			
Asp	Ile	Ile	Cys	Cys	Val	Phe	Leu	Leu	Leu	Ala	Ile	Val	Gly	Tyr	Val
		35					40				45				
Ala	Val	Gly	Ile	Ile	Ala	Trp	Thr	His	Gly	Asp	Pro	Arg	Lys	Val	Ile

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Tyr	Pro	Thr	Asp	Ser	Arg	Gly	Glu	Phe	Cys	Gly	Gln	Lys	Gly	Thr	Lys		
65					70					75					80		
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			85						90					95			
Ser	Pro	Leu	Val	Leu	Leu	Glu	Phe	Gln	Cys	Pro	Thr	Pro	Gln	Ile	Cys		
			100					105					110				
Val	Glu	Lys	Cys	Pro	Asp	Arg	Tyr	Leu	Thr	Tyr	Leu	Asn	Ala	Arg	Ser		
		115					120					125					
Ser	Arg	Asp	Phe	Glu	Tyr	Tyr	Lys	Gln	Phe	Cys	Val	Pro	Gly	Phe	Lys		
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Val	Leu	Ile	Pro	Ser	Lys	Pro	Leu	Ala	Arg	Arg	Cys	Phe	Pro	Ala	Ile		
				165					170						175		
His	Ala	Tyr	Lys	Gly	Val	Leu	Met	Val	Gly	Asn	Glu	Thr	Thr	Tyr	Glu		
			180					185					190				
Asp	Gly	His	Gly	Ser	Arg	Lys	Asn	Ile	Thr	Asp	Leu	Val	Glu	Gly	Ala		
		195					200					205					
Lys	Lys	Ala	Asn	Gly	Val	Leu	Glu	Ala	Arg	Gln	Leu	Ala	Met	Arg	Ile		
		210					215					220					
Phe	Glu	Asp	Tyr	Thr	Val	Ser	Trp	Tyr	Trp	Ile	Ile	Ile	Gly	Leu	Val		
225					230					235					240		
Ile	Ala	Met	Ala	Met	Ser	Leu	Leu	Phe	Ile	Ile	Leu	Leu	Arg	Phe	Leu		
				245					250					255			
Ala	Gly	Ile	Met	Val	Trp	Val	Met	Ile	Ile	Met	Val	Ile	Leu	Val	Leu		
			260					265					270				
Gly	Tyr	Gly	Ile	Phe	His	Cys	Tyr	Met	Glu	Tyr	Ser	Arg	Leu	Arg	Gly		
		275					280					285					
Glu	Ala	Gly	Ser	Asp	Val	Ser	Leu	Val	Asp	Leu	Gly	Phe	Gln	Thr	Asp		
		290					295				300						
Phe	Arg	Val	Tyr	Leu	His	Leu	Arg	Gln	Thr	Trp	Leu	Ala	Phe	Met	Ile		
305					310					315					320		
Ile	Leu	Ser	Ile	Leu	Glu	Val	Ile	Ile	Ile	Leu	Leu	Leu	Ile	Phe	Leu		
				325					330					335			
Arg	Lys	Arg	Ile	Leu	Ile	Ala	Ile	Ala	Leu	Ile	Lys	Glu	Ala	Ser	Arg		
			340					345					350				
Ala	Val	Gly	Tyr	Val	Met	Cys	Ser	Leu	Leu	Tyr	Pro	Leu	Val	Thr	Phe		
		355					360					365					
Phe	Leu	Cys	Leu	Cys	Ile	Ala	Tyr	Trp	Ala	Ser	Thr	Ala	Val	Phe			
		370				375				380							
Leu	Ser	Thr	Ser	Asn	Glu	Ala	Val	Tyr	Lys	Ile	Phe	Asp	Asp	Ser	Pro		
385					390					395					400		
Cys	Pro	Xaa	Tyr	Cys	Glu	Asn	Leu	Xaa	Asn	Pro	Glu	Thr	Phe	Pro	Ser		
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Ser	Asn	Glu	Ser	Arg	Gln	Cys	Pro	Asn	Ala	Arg	Cys	Gln	Phe	Ala	Phe		
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&lt;210&gt; 3817

&lt;211&gt; 419

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3817

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&lt;210&gt; 3818

&lt;211&gt; 139

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3818

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Arg Glu Ile Asn Pro Leu Leu Phe Ser Tyr Val Glu Glu Leu Val Glu
      35           40           45
Ile Arg Lys Leu Arg Gln Asp Ile Leu Leu Met Lys Pro Tyr Phe Ile
      50           55           60
Thr Cys Arg Glu Ala Met Glu Ala Arg Leu Leu Leu Gln Asp Leu Leu
      65           70           75           80
Asp Val His Ala Gly Arg Leu Gly Cys Ser Leu Thr Glu Ile His Thr
      85           90           95
Leu Phe Ala Lys His Ile Lys Leu Asp Cys Glu Arg Cys Gln Ala Lys
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Gly Phe Val Cys Glu Leu Cys Arg Glu Gly Asp Val Leu Phe Pro Phe
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&lt;210&gt; 3819

&lt;211&gt; 1731

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3819

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&lt;210&gt; 3820

&lt;211&gt; 535

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3820

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Ser	Trp	His	Phe	Glu	Gly	Ser	Trp	Ser	Cys	Ala	Gly	Ser	Cys	Phe
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Ser	Cys	Phe	Phe	Arg	Tyr	Cys	Ala	Pro	Ser	Glu	Pro	Ala	Thr	Gly
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Arg	Lys	Phe	Asp	Gly	Ala	Gly	Arg	Val	Ala	Val	Glu	Arg	Arg	Gly
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Ser	Ser	Ala	Gly	Phe	Pro	Cys	Ser	Gln	Arg	Ser	Arg	Arg	Pro	Ala
		100					105					110		
Pro	Gly	Arg	Gly	Ile	Thr	Asp	Arg	Arg	Arg	Gly	Pro	Ile	Gly	Arg

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Gly Phe Glu Leu His Phe Trp Arg Lys Ile Cys Arg Asn Cys Lys Cys		160
165	170	175
Gly Gln Glu Glu His Asp Val Leu Leu Ser Asn Glu Glu Asp Arg Lys		
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Val Gly Lys Leu Phe Glu Asp Thr Lys Tyr Thr Thr Leu Ile Ala Lys		
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Leu Lys Ser Asp Gly Ile Pro Met Tyr Lys Arg Asn Val Met Ile Leu		
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225	230	235
Tyr Glu Trp Ala Pro Pro Val Gln Asn Gln Ala Leu Ala Arg Gln Tyr		240
245	250	255
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275	280	285
Gln Asp Pro Ser Lys Cys His Glu Leu Ser Pro Arg Glu Val Lys Glu		
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Cys Lys Leu Ser Met Lys Glu Gly Asp Pro Ala Ile Tyr Ala Glu Arg		
370	375	380
Ala Gly Tyr Asp Lys Leu Trp His Pro Ala Cys Phe Val Cys Ser Thr		
385	390	395
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435	440	445
Gln Asn Trp His Leu Lys His Phe Cys Cys Phe Asp Cys Asp Ser Ile		
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Leu Ala Gly Glu Ile Tyr Val Met Val Asn Asp Lys Pro Val Cys Lys		
465	470	475
Pro Cys Tyr Val Lys Asn His Ala Val Val Arg Ser Val Leu Arg Ile		
485	490	495
Trp Leu Pro Gln Pro Ala Leu Gly Leu Glu Phe Met Leu Phe Leu Lys		
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&lt;210&gt; 3822

&lt;211&gt; 375

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3822

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			20					25					30		
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Phe	Ile	Ala	Cys	Leu	Met	Ser	Thr	Lys	Thr	Glu	Glu	Asn	Gly	Glu	Ala
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Gln	Arg	Arg	Leu	Leu	Trp	Cys	Tyr	His	Lys	Asn	Leu	Glu	Asp	Leu	Gly
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<212> PRT

<213> Homo sapiens

<400> 3824

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&lt;211&gt; 2051

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3825

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&lt;211&gt; 125

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3826

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&lt;211&gt; 1245

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3827

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<213> Homo sapiens

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&lt;210&gt; 3829

&lt;211&gt; 5713&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3829

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&lt;210&gt; 3830

&lt;211&gt; 444

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3830

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Ser	Ser	Thr	Ser	Ser	Val	Ser	Ser	Thr	Ala	Gly	Glu	Gly	Glu	Ala	Met
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<210> 3831

<211> 726

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3831

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&lt;210&gt; 3832

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3832

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50     55     60
Ser Ser Ile Leu Gln Ile Pro Lys Leu Ser Tyr Leu Gly Leu Gly Asp
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&lt;210&gt; 3833

&lt;211&gt; 1764

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3833

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<210> 3834

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3834

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Gln	Leu	Leu	Leu	Glu	Val	Ser	Gln	Gly	Leu	Ser	Arg	Asn	Leu	Lys	Phe
		180						185					190		
Leu	Thr	Asp	Ala	Cys	Ala	Leu	Ala	Ser	Asp	Lys	Ser	Arg	Asp	Arg	Phe
		195					200					205			
Ser	Arg	Glu	Gln	Phe	Lys	Leu	Gly	Val	Lys	Cys	Met	Ser	Thr	Ser	Ala
		210				215					220				
Ser	Ala	Leu	Leu	Ala	Cys	Val	Arg	Glu	Val	Lys	Val	Ala	Pro	Ser	Glu
225					230					235				240	
Leu	Ala	Arg	Ser	Arg	Cys	Ala	Leu	Phe	Ser	Gly	Pro	Leu	Val	Gln	Ala
				245					250					255	
Val	Ser	Ala	Leu	Val	Gly	Phe	Ala	Thr	Glu	Pro	Gln	Phe	Leu	Gly	Arg
			260					265					270		
Ala	Ala	Ala	Val	Ser	Ala	Glu	Gly	Lys	Ala	Val	Gln	Thr	Ala	Ile	Leu
			275				280					285			
Gly	Gly	Ala	Met	Ser	Val	Val	Ser	Ala	Cys	Val	Leu	Leu	Thr	Gln	Cys

290                      295                      300  
 Leu Arg Asp Leu Ala Gln His Pro Asp Gly Gly Ala Lys Met Ser Asp  
 305                      310                      315                      320  
 His Arg Glu Arg Leu Arg Asn Ser Ala Cys Ala Val Ser Glu Gly Cys  
                     325                      330                      335  
 Thr Leu Leu Ser Gln Ala Leu Arg Glu Arg Ser Ser Pro Arg Thr Leu  
                     340                      345                      350  
 Pro Pro Val Asn Ser Asn Ser Val Asn  
                     355                      360

&lt;210&gt; 3835

&lt;211&gt; 2366

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3835

nacgcgttcg atatccgccc ggagctccgg cgcagctcct ccaccttgga gctcatgaga  
 60  
 gcaggcctgg tggtagcag ggacggtgca ccggacggcg ggatcgagca aatgggtctg  
 120  
 gccatggagc acggaggggc ctacgctcgg gcggggggca gctctcgggg ctgctggtat  
 180  
 tacctgcgct acttcttctt ctctgtctcc ctcatccaat tctcatcat cctggggctc  
 240  
 gtgctcttca tgggtctatgg caacgtgcac gtgagcacag agtccaacct gcaggccacc  
 300  
 gaggcgcgag ccgagggcct atacagtcag ctctagggc tcacggcctc ccagtccaac  
 360  
 ttgaccaagg agctcaactt caccacccgc gccaaaggatg ccatcatgca gatgtggctg  
 420  
 aatgctcgcc gcgacctgga ccgcatcaat gccagcttcc gccagtgcc aaggtagccg  
 480  
 gtcatctaca cgaacaatca gaggtacatg gctgccatca tcttgagtga gaagcaatgc  
 540  
 agagatcaat tcaaggacat gaacaagagc tgcgatgcct tgctcttcat gctgaatcag  
 600  
 aaggtagaaga cgctggaggt ggagatagcc aaggagaaga ccatttgcac taaggataag  
 660  
 gaaagcgtgc tgctgaacaa acgcgtggcg gaggaacagc tggttgaatg cgtgaaaacc  
 720  
 cgggagctgc agcaccaaga gcgccagctg gccaaaggagc aactgcaaaa ggtgcaagcc  
 780  
 ctctgcctgc ccctggacaa ggacaagttt gagatggacc ttcgtaacct gtggagggac  
 840  
 tccattatcc cagcagcct ggacaacctg ggttacaacc tctaccatcc cctgggctcg  
 900  
 gaattggcct ccatccgcag agcctgcgac cacatgccca gcctcatgag ctccaagggt  
 960  
 gaggagctgg cccggagcct ccgggaggat atcgaacgcg tggcccgca gaactcagac  
 1020  
 ctccaacgcc agaagctgga agcccagcag ggccctgcggg ccagtcagga ggcgaaacag  
 1080  
 aaggtaggaga aggaggtca ggcccgggag gccaaagctcc aagctgaatg ctcccggcag  
 1140

acccagctag cgctggagga gaaggcgggtg ctgcggaagg aacgagacaa cctggccaag  
 1200  
 gagctggaag agaagaagag ggaggcggag cagctcagga tggagctggc catcagaaac  
 1260  
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 1320  
 atgggccctg tccccaaccc ccagcccatc gaccagcta gcctggagga gttcaagagg  
 1380  
 aagatcctgg agtcccagag gccccctgca ggcatccctg tagcccatc cagtggctga  
 1440  
 ggaggtcca ggctgagga ccaagggatg gccgactcg gcggtttgag gaggatgcag  
 1500  
 ggatagtctc acagcgcccg acacaacccc ctcccgccgc cccaaccac ccagggccac  
 1560  
 catcagacaa ctccctgcat gcaaaccctt agtaccctct cacaccgca ccgcgcctc  
 1620  
 acgatccctc acccagagca cagggccgag gagatgacgt caccgaagca acggcgctga  
 1680  
 cgtcacatat caccgtggtg atggcgctac gtggccatgt agacgtcacg aagagatata  
 1740  
 gcgatggcgt cgtgcagatg cagcacgtcg cacacagaca tggggaactt ggcacgtg  
 1800  
 cacaccgaga tgcagcaacg acgtcacggg ccatgtcgac gtcacacata ttaatgtcac  
 1860  
 acagacggcg cgatggcatc acacagacgg tgatgatgtc acacacagac acagtgacaa  
 1920  
 cacacaccat gacaacgaca cctatagata tggcaccaac atcacatgca cgcacccct  
 1980  
 ttcacacaca ctttctaccc aattctcacc tagtgtcacg ttcccccgac cctggcacac  
 2040  
 gggccaaggt acccagagga tcccatcccc tcccgcacag ccctggggccc cagcacctcc  
 2100  
 cctcctccag cttcctggcc tcccagccac ttcctcacc ccagtgcctg gaccggagg  
 2160  
 tgagaacagg aagccattca cctccgctcc ttgagcgtga gtgtttccag gaccctctcg  
 2220  
 gggccctgag ccgggggtga gggtcacctg ttgtcgggag gggagccact ccttctcccc  
 2280  
 caactcccag ccctgcctgt ggcccggtga aatgttggtg gcacttaata aatattagta  
 2340  
 aatccttaaa aaaaaaaaaa aaaaaa  
 2366

&lt;210&gt; 3836

&lt;211&gt; 479

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3836

Xaa	Ala	Phe	Asp	Ile	Arg	Pro	Glu	Leu	Arg	Arg	Ser	Ser	Ser	Thr	Leu
1				5				10						15	
Glu	Leu	Met	Arg	Ala	Gly	Leu	Val	Val	Ser	Arg	Asp	Gly	Ala	Pro	Asp
			20					25					30		
Gly	Gly	Ile	Glu	Gln	Met	Gly	Leu	Ala	Met	Glu	His	Gly	Gly	Ser	Tyr

	35						40						45					
Ala Arg Ala Gly Gly Ser Ser Arg Gly Cys Trp Tyr Tyr Leu Arg Tyr																		
50						55					60							
Phe Phe Leu Phe Val Ser Leu Ile Gln Phe Leu Ile Ile Leu Gly Leu					70					75					80			
65																		
Val Leu Phe Met Val Tyr Gly Asn Val His Val Ser Thr Glu Ser Asn					85				90					95				
Leu Gln Ala Thr Glu Arg Arg Ala Glu Gly Leu Tyr Ser Gln Leu Leu								105						110				
Gly Leu Thr Ala Ser Gln Ser Asn Leu Thr Lys Glu Leu Asn Phe Thr								120						125				
Thr Arg Ala Lys Asp Ala Ile Met Gln Met Trp Leu Asn Ala Arg Arg						135								140				
Asp Leu Asp Arg Ile Asn Ala Ser Phe Arg Gln Cys Gln Gly Asp Arg					150					155					160			
145																		
Val Ile Tyr Thr Asn Asn Gln Arg Tyr Met Ala Ala Ile Ile Leu Ser					165					170					175			
Glu Lys Gln Cys Arg Asp Gln Phe Lys Asp Met Asn Lys Ser Cys Asp					180				185					190				
Ala Leu Leu Phe Met Leu Asn Gln Lys Val Lys Thr Leu Glu Val Glu								200						205				
Ile Ala Lys Glu Lys Thr Ile Cys Thr Lys Asp Lys Glu Ser Val Leu						215								220				
210																		
Leu Asn Lys Arg Val Ala Glu Glu Gln Leu Val Glu Cys Val Lys Thr					230					235					240			
225																		
Arg Glu Leu Gln His Gln Glu Arg Gln Leu Ala Lys Glu Gln Leu Gln					245					250					255			
Lys Val Gln Ala Leu Cys Leu Pro Leu Asp Lys Asp Lys Phe Glu Met					260				265					270				
Asp Leu Arg Asn Leu Trp Arg Asp Ser Ile Ile Pro Arg Ser Leu Asp								280						285				
Asn Leu Gly Tyr Asn Leu Tyr His Pro Leu Gly Ser Glu Leu Ala Ser						295								300				
Ile Arg Arg Ala Cys Asp His Met Pro Ser Leu Met Ser Ser Lys Val					310					315					320			
305																		
Glu Glu Leu Ala Arg Ser Leu Arg Ala Asp Ile Glu Arg Val Ala Arg					325					330					335			
Glu Asn Ser Asp Leu Gln Arg Gln Lys Leu Glu Ala Gln Gln Gly Leu					340				345					350				
Arg Ala Ser Gln Glu Ala Lys Gln Lys Val Glu Lys Glu Ala Gln Ala								360						365				
Arg Glu Ala Lys Leu Gln Ala Glu Cys Ser Arg Gln Thr Gln Leu Ala						375								380				
Leu Glu Glu Lys Ala Val Leu Arg Lys Glu Arg Asp Asn Leu Ala Lys					390					395					400			
385																		
Glu Leu Glu Glu Lys Lys Arg Glu Ala Glu Gln Leu Arg Met Glu Leu					405					410					415			

465

470

475

&lt;210&gt; 3837

&lt;211&gt; 2084

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3837

nagaggaggc ttttctctgg tgcttggcag atgcatgaag agactgatgg catgtggact  
60  
attcagaaaa ctgtggcaca ctgttgggtg caaggtgacc ttatgagatg ggctgacagt  
120  
ggggactgcc aactcatgtg tctgtttage tcaccttttc ctgtgcccac cctccaaccc  
180  
cccaaccatg tgggaaggaa atgtttggcc ctctgaccct aactacatcc cacagactgg  
240  
gatggaaagg tgtctgagat taagaagaag atcaagtoga tcctgcctgg aaggtcctgt  
300  
gatctactgc aagacaccag ccacctgcct cccgagcact cggatgtggt gatcgtggga  
360  
gggtgggtgc ttggcttgtc tgtggcctat tggctgaaga agctggagag cagacgaggt  
420  
gctattcgag tgctagtggg ggaacgggac cacacgtatt cacaggcctc caccgggctc  
480  
tcagtaggtg ggatttgcga gcagttctca ttgcctgaga acatccagct ctccctcttt  
540  
tcagccagct ttctacggaa catcaatgag tacctggccg tagtcgatgc tcctccctg  
600  
gacctccggt tcaaccctc gggctacctc ttgctggctt cagaaaagga tgctgcagcc  
660  
atggagagca acgtgaaagt gcagaggcag gaggggagcca aagtttctct gatgtctcct  
720  
gatcagcttc ggaacaagtt tccctggata aacacagagg gagtggcttt ggcgtcttat  
780  
gggatggagg acgaagggtg gtttgacccc tgggtgtctgc tccaggggct tcggcgaaa  
840  
gtccagtcct tgggagtcct tttctgccag ggagaggtga cacgttttgt ctcttcatt  
900  
caacgcatgt tgaccacaga tgacaaagcg gtggtcttga aaaggatcca tgaagtccat  
960  
gtgaagatgg accgcagcct ggagtaccag cctgtggaat gcgccattgt gatcaacgca  
1020  
gccggagcct ggtctgcgca aatcgagca ctggctgggtg ttggagaggg gccgcctggc  
1080  
accctgcagg gcaccaagct acctgtggag ccgaggaaaa ggtatgtgta tgtgtggcac  
1140  
tgccccagg gaccaggcct agagactccg cttgttgag acaccagtgg agcctatttt  
1200  
cgccgggaag gattaggtag caactaccta ggtggtcgta gcccactga gcaggaagaa  
1260  
ccggaccgg cgaacctgga agtgaccat gatttcttcc aggacaaggt gtggcccat  
1320  
ttggccctga gggteccagc ttttgagact ctgaagtgtt ttgtgcaccc gcaggttcag  
1380

agcgccctggg ccggctatta cgactacaac acctttgacc agaatggcgt ggtgggcccc  
 1440  
 caccgcctag ttgtcaacat gtactttgct actggcttca gtggtcacgg gctccagcag  
 1500  
 gcccctggca ttgggcgagc tgtagcagag atggtactga agggcagggt ccagaccatc  
 1560  
 gacctgagcc ccttctcttt taccgcgttt tacttgggag agaagatcca ggagaacaac  
 1620  
 atcatctgag catgtgtgct ctgcactggc tccactggct tgcactctgg ctgtgttcac  
 1680  
 agccttggtt gctgcttcca tcttccccag tactgtgcca ggcttctcc ccctccccag  
 1740  
 tgcctctccc tctcaggcag gccattgcac ccatatggct gggcaggcac aggcagtga  
 1800  
 gccgaggcca atagcgagt atgagcggga tcctaggact gatctgtagc ccatgctgat  
 1860  
 gtcacccacc agggcaatcc atctggaggc ctgagcacc tgggccagga ctggcttcac  
 1920  
 cctggcactg accaggaaag actgcctctg accctcttag cagacagagc ccaggcatgg  
 1980  
 gagcactctg gggcagcctg gctcagggtt attgatttcc gtctgtttac cctatccatt  
 2040  
 aatcaataca tgtaattaac tccttcaaaa aaaaaaaaaa aaaa  
 2084

&lt;210&gt; 3838

&lt;211&gt; 468

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3838

Leu	His	Pro	Thr	Asp	Trp	Asp	Gly	Lys	Val	Ser	Glu	Ile	Lys	Lys	Lys
1				5				10						15	
Ile	Lys	Ser	Ile	Leu	Pro	Gly	Arg	Ser	Cys	Asp	Leu	Leu	Gln	Asp	Thr
			20					25					30		
Ser	His	Leu	Pro	Pro	Glu	His	Ser	Asp	Val	Val	Ile	Val	Gly	Gly	Gly
		35					40					45			
Val	Leu	Gly	Leu	Ser	Val	Ala	Tyr	Trp	Leu	Lys	Lys	Leu	Glu	Ser	Arg
	50					55					60				
Arg	Gly	Ala	Ile	Arg	Val	Leu	Val	Val	Glu	Arg	Asp	His	Thr	Tyr	Ser
65					70					75					80
Gln	Ala	Ser	Thr	Gly	Leu	Ser	Val	Gly	Gly	Ile	Cys	Gln	Gln	Phe	Ser
				85					90					95	
Leu	Pro	Glu	Asn	Ile	Gln	Leu	Ser	Leu	Phe	Ser	Ala	Ser	Phe	Leu	Arg
			100					105					110		
Asn	Ile	Asn	Glu	Tyr	Leu	Ala	Val	Val	Asp	Ala	Pro	Pro	Leu	Asp	Leu
	115						120					125			
Arg	Phe	Asn	Pro	Ser	Gly	Tyr	Leu	Leu	Leu	Ala	Ser	Glu	Lys	Asp	Ala
	130					135					140				
Ala	Ala	Met	Glu	Ser	Asn	Val	Lys	Val	Gln	Arg	Gln	Glu	Gly	Ala	Lys
145					150					155				160	
Val	Ser	Leu	Met	Ser	Pro	Asp	Gln	Leu	Arg	Asn	Lys	Phe	Pro	Trp	Ile
				165					170					175	
Asn	Thr	Glu	Gly	Val	Ala	Leu	Ala	Ser	Tyr	Gly	Met	Glu	Asp	Glu	Gly

180 185 190  
 Trp Phe Asp Pro Trp Cys Leu Leu Gln Gly Leu Arg Arg Lys Val Gln  
 195 200 205  
 Ser Leu Gly Val Leu Phe Cys Gln Gly Glu Val Thr Arg Phe Val Ser  
 210 215 220  
 Ser Ser Gln Arg Met Leu Thr Thr Asp Asp Lys Ala Val Val Leu Lys  
 225 230 235 240  
 Arg Ile His Glu Val His Val Lys Met Asp Arg Ser Leu Glu Tyr Gln  
 245 250 255  
 Pro Val Glu Cys Ala Ile Val Ile Asn Ala Ala Gly Ala Trp Ser Ala  
 260 265 270  
 Gln Ile Ala Ala Leu Ala Gly Val Gly Glu Gly Pro Pro Gly Thr Leu  
 275 280 285  
 Gln Gly Thr Lys Leu Pro Val Glu Pro Arg Lys Arg Tyr Val Tyr Val  
 290 295 300  
 Trp His Cys Pro Gln Gly Pro Gly Leu Glu Thr Pro Leu Val Ala Asp  
 305 310 315 320  
 Thr Ser Gly Ala Tyr Phe Arg Arg Glu Gly Leu Gly Ser Asn Tyr Leu  
 325 330 335  
 Gly Gly Arg Ser Pro Thr Glu Gln Glu Glu Pro Asp Pro Ala Asn Leu  
 340 345 350  
 Glu Val Asp His Asp Phe Phe Gln Asp Lys Val Trp Pro His Leu Ala  
 355 360 365  
 Leu Arg Val Pro Ala Phe Glu Thr Leu Lys Cys Phe Val His Pro Gln  
 370 375 380  
 Val Gln Ser Ala Trp Ala Gly Tyr Tyr Asp Tyr Asn Thr Phe Asp Gln  
 385 390 395 400  
 Asn Gly Val Val Gly Pro His Pro Leu Val Val Asn Met Tyr Phe Ala  
 405 410 415  
 Thr Gly Phe Ser Gly His Gly Leu Gln Gln Ala Pro Gly Ile Gly Arg  
 420 425 430  
 Ala Val Ala Glu Met Val Leu Lys Gly Arg Phe Gln Thr Ile Asp Leu  
 435 440 445  
 Ser Pro Phe Leu Phe Thr Arg Phe Tyr Leu Gly Glu Lys Ile Gln Glu  
 450 455 460  
 Asn Asn Ile Ile  
 465

&lt;210&gt; 3839

&lt;211&gt; 758

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3839

nnacgcgtgc aggactctct ggaagtcacc cttcccagca aacaagagga ggaggatgag  
 60  
 gaggaggagg aggaggagaa agaccagcct gccgagatgg agtaccttaa ctctcgctgt  
 120  
 gtccttttca cttatttcca gggagacatt gggtcagtag tggatgaaca cttctcaaga  
 180  
 gctttgggccc aagccatcac cctccatcca gaatctgccca tttcaaaaag caagatgggg  
 240  
 ctaaccccccc tatggcgaga cagctcagct ctctcaagcc agcggaatag tttcccaact  
 300

tccttttggga ccagctctta ccagccccc cctgcacctt gtttggggg agttcatcct  
 360  
 gacttccagg tcaactggacc ccctggcacc ttttctgcag ctgatcccag tccttggccg  
 420  
 ggacacaacc tgcatacagac tggcccagcc cctccccctg ctgtgtctga gtccctggcct  
 480  
 tatectttga catctcaggt gagcccatcc tacagccata tgcatacagt gtacatgcgg  
 540  
 caccaccacc ctcatgcccc catgcaccac cgccaccgcc accatcatca ccataccacc  
 600  
 cctcctgctg gctctgcctt ggatccatcc tatgggcctc tgctgatgcc ttcagtgcac  
 660  
 gcggccagga ttctgtctcc ccagtgtgac atcacaaaga cagaaccaac tacagtcacc  
 720  
 tctgtacac cagcatgggc tggagccttt catggaac  
 758

&lt;210&gt; 3840

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3840

Xaa	Arg	Val	Gln	Asp	Ser	Leu	Glu	Val	Thr	Leu	Pro	Ser	Lys	Gln	Glu
1			5					10					15		
Glu	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu	Lys	Asp	Gln	Pro	Ala	Glu	
		20					25				30				
Met	Glu	Tyr	Leu	Asn	Ser	Arg	Cys	Val	Leu	Phe	Thr	Tyr	Phe	Gln	Gly
		35					40				45				
Asp	Ile	Gly	Ser	Val	Val	Asp	Glu	His	Phe	Ser	Arg	Ala	Leu	Gly	Gln
	50				55				60						
Ala	Ile	Thr	Leu	His	Pro	Glu	Ser	Ala	Ile	Ser	Lys	Ser	Lys	Met	Gly
	65			70				75						80	
Leu	Thr	Pro	Leu	Trp	Arg	Asp	Ser	Ser	Ala	Leu	Ser	Ser	Gln	Arg	Asn
			85					90					95		
Ser	Phe	Pro	Thr	Ser	Phe	Trp	Thr	Ser	Ser	Tyr	Gln	Pro	Pro	Pro	Ala
	100						105					110			
Pro	Cys	Leu	Gly	Gly	Val	His	Pro	Asp	Phe	Gln	Val	Thr	Gly	Pro	Pro
	115					120					125				
Gly	Thr	Phe	Ser	Ala	Ala	Asp	Pro	Ser	Pro	Trp	Pro	Gly	His	Asn	Leu
	130				135					140					
His	Gln	Thr	Gly	Pro	Ala	Pro	Pro	Pro	Ala	Val	Ser	Glu	Ser	Trp	Pro
	145			150					155					160	
Tyr	Pro	Leu	Thr	Ser	Gln	Val	Ser	Pro	Ser	Tyr	Ser	His	Met	His	Asp
			165				170						175		
Val	Tyr	Met	Arg	His	His	His	Pro	His	Ala	His	Met	His	His	Arg	His
		180					185					190			
Arg	His	His	His	His	His	His	Pro	Pro	Pro	Ala	Gly	Ser	Ala	Leu	Asp
	195					200					205				
Pro	Ser	Tyr	Gly	Pro	Leu	Leu	Met	Pro	Ser	Val	His	Ala	Ala	Arg	Ile
	210				215					220					
Pro	Ala	Pro	Gln	Cys	Asp	Ile	Thr	Lys	Thr	Glu	Pro	Thr	Thr	Val	Thr
	225			230					235					240	
Ser	Ala	Thr	Ser	Ala	Trp	Ala	Gly	Ala	Phe	His	Gly				

245

250

&lt;210&gt; 3841

&lt;211&gt; 367

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3841

ctgggaactc cccacacttc cgtgggcaac atcttggggt cattgatcgc tggctactgg

60

gtgtccacat gctggggcct gtctttcgtc gtgcctggag ccatcgtggc agccatgggg

120

atagtgtgct ttctcttcct cattgaacat ccgaacgacg tcaggtgctc ctccaccctg

180

gtgacgcact caaaaggcta tgagaatggg acaaacaggt tgagcctccc gaagccaatc

240

ttgaagagcg aaaagaacaa gcctctggac ccagagatgc agtgctgct gctctcagat

300

gggaagggtt ccatccaccc gaaccacgtc gtcattctcc ccggggacgg tgggagtggc

360

ccggccg

367

&lt;210&gt; 3842

&lt;211&gt; 122

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3842

Leu Gly Thr Pro His Thr Ser Val Gly Asn Ile Leu Gly Ser Leu Ile

1

5

10

15

Ala Gly Tyr Trp Val Ser Thr Cys Trp Gly Leu Ser Phe Val Val Pro

20

25

30

Gly Ala Ile Val Ala Ala Met Gly Ile Val Cys Phe Leu Phe Leu Ile

35

40

45

Glu His Pro Asn Asp Val Arg Cys Ser Ser Thr Leu Val Thr His Ser

50

55

60

Lys Gly Tyr Glu Asn Gly Thr Asn Arg Leu Ser Leu Pro Lys Pro Ile

65

70

75

80

Leu Lys Ser Glu Lys Asn Lys Pro Leu Asp Pro Glu Met Gln Cys Leu

85

90

95

Leu Leu Ser Asp Gly Lys Gly Ser Ile His Pro Asn His Val Val Ile

100

105

110

Leu Pro Gly Asp Gly Gly Ser Gly Pro Ala

115

120

&lt;210&gt; 3843

&lt;211&gt; 712

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3843

ngctgtccgg cccgcagggc ggtcgaggtg ggaacggagc agccccgggg gcccccttga

60

ggcggcgagg ccgcgaaggg cgcggggctg gaggcccgcg gcgccatggc tcacgtcggc  
 120  
 tcccgcgaagc gctcgaggag tcgcagccgg tcccggggac gggggtcgga aaagagaaag  
 180  
 aagaagagca ggaaagacac ctcgaggaac tgctcggcct ccacatccca aggtcgcaag  
 240  
 gccagcacgg cccctggggc ggaggcctca ccttctccct gcatcacaga gagaagcaag  
 300  
 cagaaggccc ggaggagaac aagatccagc tcctcctcct cttcttccag ttcttctagc  
 360  
 tcctcttctt cctcctcgtc ctcctcctct tcctccagtg atggccggaa gaagcggggg  
 420  
 aagtacaagg acaagaggag gaagaagaag aagaagagga agaagctgaa gaagaagggc  
 480  
 aaggagaagg cggaagcaca gcaggcagag catcatccgc aaggtggtgg accctgagac  
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&lt;210&gt; 3844

&lt;211&gt; 143

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3844

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Arg	Gly	Arg	Gly	Ser	Glu	Lys	Arg	Lys	Lys	Lys	Ser	Arg	Lys	Asp	Thr
			20					25					30		
Ser	Arg	Asn	Cys	Ser	Ala	Ser	Thr	Ser	Gln	Gly	Arg	Lys	Ala	Ser	Thr
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	50					55				60					
Lys	Gln	Lys	Ala	Arg	Arg	Arg	Thr	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Ser
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Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
			85							90				95	
Ser	Ser	Asp	Gly	Arg	Lys	Lys	Arg	Gly	Lys	Tyr	Lys	Asp	Lys	Arg	Arg
			100					105					110		
Lys	Lys	Lys	Lys	Lys	Arg	Lys	Lys	Leu	Lys	Lys	Lys	Gly	Lys	Glu	Lys
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Ala	Glu	Ala	Gln	Gln	Ala	Glu	His	His	Pro	Gln	Gly	Gly	Gly	Pro	
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&lt;210&gt; 3845

&lt;211&gt; 2302

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3845

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<211> 197

<212> PRT

<213> Homo sapiens

<400> 3846

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Gly	Leu	Arg	Gly	Gly	His	Leu	Ser	Glu	Thr	Val	Cys	Ala	His	Ala	Glu
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<212> DNA  
<213> Homo sapiens

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<211> 120

<212> PRT

<213> Homo sapiens

<400> 3848

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			20					25					30		
Asn	Met	Asn	Thr	Leu	Tyr	Pro	Asp	Ala	Thr	Pro	Glu	Glu	Leu	Gln	Ala
	35						40					45			
Met	Asp	Asn	Val	Cys	Ile	Ile	Cys	Arg	Glu	Glu	Met	Val	Thr	Gly	Ala
	50				55						60				
Lys	Arg	Leu	Pro	Cys	Asn	His	Ile	Phe	His	Thr	Arg	Trp	Glu	Gly	Pro
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Trp	Gly	Ala	Cys	Pro	Ala	Gly	Pro	Arg	Pro	Gln	Lys	Ala	Gly	Pro	Lys
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<210> 3849

<211> 1139

<212> DNA

<213> Homo sapiens

<400> 3849

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<211> 257

<212> PRT

<213> Homo sapiens

<400> 3850

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			20					25						30	
Phe	Pro	Phe	Asn	Gln	Trp	Gly	Leu	Gln	Pro	Arg	Ser	Leu	Leu	Leu	Gln
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Asp	Asp	Pro	Pro	Pro	Ser	Thr	Leu	Leu	Lys	Asp	Tyr	Gln	Asn	Val	Pro
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Gly	Ile	Glu	Lys	Val	Asp	Asp	Val	Val	Lys	Arg	Leu	Leu	Ser	Leu	Glu
			85						90					95	
Met	Ala	Asn	Lys	Lys	Glu	Met	Leu	Lys	Ile	Lys	Gln	Glu	Gln	Phe	Met
			100					105						110	
Lys	Lys	Ile	Val	Ala	Asn	Pro	Glu	Asp	Thr	Arg	Ser	Leu	Glu	Ala	Arg
		115					120						125		
Ile	Ile	Ala	Leu	Ser	Val	Lys	Ile	Arg	Ser	Tyr	Glu	Glu	His	Leu	Glu
		130					135					140			
Lys	His	Arg	Lys	Asp	Lys	Ala	His	Lys	Arg	Tyr	Leu	Leu	Met	Ser	Ile
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			165					170						175	
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&lt;210&gt; 3851

&lt;211&gt; 1183

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3851

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1080

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<211> 323

<212> PRT

<213> Homo sapiens

<400> 3852

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Val	Leu	Val	Val	Leu	Leu	Val	Val	Ile	Val	Val	Leu	Ala	Phe	Asn	Tyr
			20					25					30		
Trp	Ser	Ile	Ser	Ser	Arg	His	Val	Leu	Leu	Gln	Glu	Glu	Val	Ala	Glu
		35					40					45			
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Lys	Arg	Asn	Ser	Asp	Leu	Leu	Leu	Val	Asp	Thr	His	Lys	Lys	Gln	
65					70				75					80	
Ile	Asp	Gln	Lys	Glu	Ala	Asp	Tyr	Gly	Arg	Leu	Ser	Ser	Arg	Leu	Gln
				85					90					95	
Ala	Arg	Glu	Gly	Leu	Gly	Lys	Arg	Cys	Glu	Asp	Asp	Lys	Val	Lys	Leu
			100					105					110		
Gln	Asn	Asn	Ile	Ser	Tyr	Gln	Met	Ala	Asp	Ile	His	His	Leu	Lys	Glu
		115					120					125			
Gln	Leu	Ala	Glu	Leu	Arg	Gln	Glu	Phe	Leu	Arg	Gln	Glu	Asp	Gln	Leu
	130					135					140				
Gln	Asp	Tyr	Arg	Lys	Asn	Asn	Thr	Tyr	Leu	Val	Lys	Arg	Leu	Glu	Tyr
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				165					170					175	
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Pro	Thr	Gly	Gln	Pro	Leu	Ser	Pro	Asn	Met	Pro	Pro	Asp	Ser	His	Ile
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 <212> DNA  
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 <211> 125  
 <212> PRT  
 <213> Homo sapiens

<400> 3854  
 Arg Thr His Met Ala Asp Glu Asn Lys Asn Glu Tyr Ala Ala Gln Leu  
 1 5 10 15  
 Gln Asn Phe Asn Gly Glu Gln His Lys His Phe Tyr Val Val Ile Pro  
 20 25 30  
 Gln Ile Tyr Lys Gln Leu Gln Glu Met Asp Glu Arg Arg Thr Ile Lys  
 35 40 45  
 Leu Ser Glu Cys Tyr Arg Gly Phe Ala Asp Ser Glu Arg Lys Val Ile  
 50 55 60  
 Pro Ile Ile Ser Lys Cys Leu Glu Gly Met Ile Leu Ala Ala Lys Ser  
 65 70 75 80  
 Val Asp Glu Arg Arg Asp Ser Gln Met Val Val Asp Ser Phe Lys Ser  
 85 90 95  
 Gly Phe Glu Pro Pro Gly Asp Phe Pro Phe Glu Asp Tyr Ser Gln His  
 100 105 110  
 Ile Tyr Arg Thr Ile Ser Asp Gly Thr Ile Ser Ala Ser  
 115 120 125

<210> 3855  
 <211> 1377  
 <212> DNA  
 <213> Homo sapiens

<400> 3855  
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 120

cagaactgtg gctctggtgt ggttgggata gtggactatg gacctagacc caacaagagt  
 180  
 gaaatgtggg atgtcttctg ctatcggatg aaagatgtga actgcacctg caagggtggg  
 240  
 tatgtgggag atggcttctc atgcagtggg aacctgctgc aggtcctgat gtccttcccc  
 300  
 tcactcacia acttcttgac ggaagtgtg gcctattcca acagctcage tcgagggcgt  
 360  
 gcatttctag aacacctgac tgacctgtcc atccgaggca ccctctttgt gccacagaac  
 420  
 agtgggctgg gggagaatga gaccttgtct gggcgggaca tcgagcacca cctcgccaat  
 480  
 gtcagcatgt tttctacaa tgacctgtc aatggcaccn accctgcaaa cgagggtggg  
 540  
 aagcaagctg ctcatcactg ccagccagga cccactnncc aaccgacgga gaccaggttt  
 600  
 gttgatggaa gagccattct gcagtgggac atctttgcct ccaatgggat cattcatgtc  
 660  
 atttccaggc ctttaaaagc accccctgcc cccgtgacct tgaccacac tggttggga  
 720  
 gcagggatct tctttgccat catcctggtg actggggctg ttgccttggc tgcttactcc  
 780  
 tactttcgga taaaccggag aacaatcggc ttccagcatt ttgagtcgga agaggacatt  
 840  
 aatgttgag ctcttgga gacgcagcct gagaatatct cgaaccctt gtatgagagc  
 900  
 acaacctcag ctccccaga accttcctac gacccttca cggactctga agaacggcag  
 960  
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 1080  
 taaagtccct taagcactca gaagccatac ctcatctctc tggctgatct gggggttgtt  
 1140  
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 1200  
 ggctcttctt cctttgtact cttcagctgg cacctgtctc attctgcct acatgatggg  
 1260  
 taactgtgat ctttcttccc tgtagattg taagcctcg tctttgtatc ccagcccta  
 1320  
 gccagtgcc tgacacagga actgtgcaca ataaagggtt atggaacaga aacaaaa  
 1377

&lt;210&gt; 3856

&lt;211&gt; 330

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3856

Xaa	Ala	Ala	Thr	Met	Ala	Thr	Tyr	Asn	Gln	Leu	Ser	Tyr	Ala	Gln	Lys
1				5				10						15	
Ala	Lys	Tyr	His	Leu	Cys	Ser	Ala	Gly	Trp	Leu	Glu	Thr	Gly	Arg	Val
			20					25					30		
Ala	Tyr	Pro	Thr	Ala	Phe	Ala	Ser	Gln	Asn	Cys	Gly	Ser	Gly	Val	Val

35 40 45  
 Gly Ile Val Asp Tyr Gly Pro Arg Pro Asn Lys Ser Glu Met Trp Asp  
 50 55 60  
 Val Phe Cys Tyr Arg Met Lys Asp Val Asn Cys Thr Cys Lys Val Gly  
 65 70 75 80  
 Tyr Val Gly Asp Gly Phe Ser Cys Ser Gly Asn Leu Leu Gln Val Leu  
 85 90 95  
 Met Ser Phe Pro Ser Leu Thr Asn Phe Leu Thr Glu Val Leu Ala Tyr  
 100 105 110  
 Ser Asn Ser Ser Ala Arg Gly Arg Ala Phe Leu Glu His Leu Thr Asp  
 115 120 125  
 Leu Ser Ile Arg Gly Thr Leu Phe Val Pro Gln Asn Ser Gly Leu Gly  
 130 135 140  
 Glu Asn Glu Thr Leu Ser Gly Arg Asp Ile Glu His His Leu Ala Asn  
 145 150 155 160  
 Val Ser Met Phe Phe Tyr Asn Asp Leu Val Asn Gly Thr Xaa Pro Ala  
 165 170 175  
 Asn Glu Gly Gly Lys Gln Ala Ala His His Cys Gln Pro Gly Pro Thr  
 180 185 190  
 Xaa Gln Pro Thr Glu Thr Arg Phe Val Asp Gly Arg Ala Ile Leu Gln  
 195 200 205  
 Trp Asp Ile Phe Ala Ser Asn Gly Ile Ile His Val Ile Ser Arg Pro  
 210 215 220  
 Leu Lys Ala Pro Pro Ala Pro Val Thr Leu Thr His Thr Gly Leu Gly  
 225 230 235 240  
 Ala Gly Ile Phe Phe Ala Ile Ile Leu Val Thr Gly Ala Val Ala Leu  
 245 250 255  
 Ala Ala Tyr Ser Tyr Phe Arg Ile Asn Arg Arg Thr Ile Gly Phe Gln  
 260 265 270  
 His Phe Glu Ser Glu Glu Asp Ile Asn Val Ala Ala Leu Gly Lys Gln  
 275 280 285  
 Gln Pro Glu Asn Ile Ser Asn Pro Leu Tyr Glu Ser Thr Thr Ser Ala  
 290 295 300  
 Pro Pro Glu Pro Ser Tyr Asp Pro Phe Thr Asp Ser Glu Glu Arg Gln  
 305 310 315 320  
 Leu Glu Gly Asn Asp Pro Leu Arg Thr Leu  
 325 330

&lt;210&gt; 3857

&lt;211&gt; 797

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3857

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 gcgccctgcc cgacgtcatg cagggcatgg tgctcagctc catgcagcac ttcagcgagg  
 120  
 ccttcacca ggtcctgggc gagaagcata agcgcggcca cctggccgag gccgagggcc  
 180  
 acagggacac ttgcgacgaa gactcgggtg ccggcgagtc ggaccgcata gacgatggca  
 240  
 ctgttaatgg ccgcggctgc tccccgggag agtcggcctc ggggggcctg tccaaaaagc  
 300

tgctgctggg cagccccagc tcgctgagcc ccttctctaa gcgcatcaag ctcgagaagg  
 360  
 agttcgacct gcccccgcc gcgatgcca acacggagaa cgtgtactcg cagtggctcg  
 420  
 ccggctacgc ggctccagg cagctcaaag atcccttctc tagcttcgga gactccagac  
 480  
 aatcgctttt tgctctctcg tcggagcact cctcggagaa cgggagcttg cgcttctcca  
 540  
 caccgccccg ggagctggac ggagggatct cggggcgag cggcacggga agtggaggga  
 600  
 gcacgccccca tattagtggc ccgggccccg gcaggccccag ctcaaaagag ggcagacgca  
 660  
 gcgacacttg ttcttcacac acccccattc ggcgtagtac ccagagagct caagatgtgt  
 720  
 ggcagttttc ggatggaagc tcgagagccc ttaagttctg agaaaatttg aagcccccg  
 780  
 gggtaggggtg gacgcgt  
 797

<210> 3858  
 <211> 76  
 <212> PRT  
 <213> Homo sapiens

<400> 3858  
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 Ala Thr Arg Ala Ala Pro Cys Pro Thr Ser Cys Arg Ala Trp Cys Ser  
 20 25 30  
 Ala Pro Cys Ser Thr Ser Ala Arg Pro Ser Thr Arg Ser Trp Ala Arg  
 35 40 45  
 Ser Ile Ser Ala Ala Thr Trp Pro Arg Pro Arg Ala Thr Gly Thr Leu  
 50 55 60  
 Ala Thr Lys Thr Arg Trp Pro Ala Ser Arg Thr Ala  
 65 70 75

<210> 3859  
 <211> 1449  
 <212> DNA  
 <213> Homo sapiens

<400> 3859  
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 60  
 aaggagactc aatttgaact cagagtactg ggaaaagatt gtaacgaaac ctcatctctt  
 120  
 tttgaagctc ggagtaaaac tgcttgcaag cacctctgga agtgcagtgt ggaacatcat  
 180  
 acatttttta gaatgccaga aaatgaatcc aattcactgt caagaaaact cagcaagttt  
 240  
 ggatccatac gttataagca ccgctacagt ggcaggacag ctttgcaa at gagccgagat  
 300  
 ctttctattc agcttccccg gcctgatcag aatgtgacaa gaagtcgaag caagacttac  
 360

cctaagcgaa tagcacaaac acagccagct gaatcaaaca ccatcagtag gataactgca  
 420  
 aacatggaaa atggagaaaa tgaaggaaca attaaaatta ttgcaccttc accagtaaaa  
 480  
 agctttaaga aagcaaagaa tgaaaatagc cctgataccc aaagaagcaa atctcatgca  
 540  
 ccgtgggaag aaaatggccc ccagagtggga ctctacaatt ctcccagtga tcgcactaag  
 600  
 tcgccaaagt tcccttacac gcgtcgccga aacccctcct gtggaagtga caatgattct  
 660  
 gtacagcctg tgaggaggag gaaagcccat aacagtgggtg aagattcaga tcttaagcaa  
 720  
 aggaggaggt cacgttcacg ctgtaacacc agcagtggta gtgaatcaga aaattcta  
 780  
 agagaacacc ggaaaaagag aaacagaata cggcaggaga atgatatggt tgattcagcg  
 840  
 cctcagtggg aagctgtatt aaggagacaa aaggaaaaaa accaagccga cccaacaac  
 900  
 aggcgatcca gacacagatc tcgttcgaga agccccgata tccaagcaaa agaagagtta  
 960  
 tggaagcaca ttcaaaaaga acttgtggat ccatccgat tgtccgaaga acaattaaaa  
 1020  
 gagattccat aactaaaaat agagtgagtg cctttcagaa tcttctcacc aaagctttat  
 1080  
 tagtgcttga cacaaggtga cccaatccgc atcaggcatt ctcatcgc acgaagttac  
 1140  
 cgccagtatc gcaggtccca gtgttcagat ggggagcgat cagttctctc ggaagtgaat  
 1200  
 tcaaaaacag atcttgtacc accacttccg gtgaccatt cttcggtatgc tcagggttct  
 1260  
 ggggatgcta cagttcatca gagaagaaat ggggtctaaag atagcctgat ggaagaaaaa  
 1320  
 cctcagacat ctacaaacaa cctggctgga aaacacacag caaaaacaat aaaaactata  
 1380  
 caagcttccc gcctcaagac agagacttga tctgatgaa ggggtcaagg taggggtggg  
 1440  
 aaggttggtg  
 1449

<210> 3860

<211> 348

<212> PRT

<213> Homo sapiens

<400> 3860

Tyr	Lys	Asn	Lys	Lys	Gln	Val	Gly	Lys	Tyr	Phe	Trp	Pro	Arg	Ile	Thr
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Lys	Val	His	Phe	Lys	Glu	Thr	Gln	Phe	Glu	Leu	Arg	Val	Leu	Gly	Lys
		20					25					30			
Asp	Cys	Asn	Glu	Thr	Ser	Phe	Phe	Phe	Glu	Ala	Arg	Ser	Lys	Thr	Ala
		35				40					45				
Cys	Lys	His	Leu	Trp	Lys	Cys	Ser	Val	Glu	His	His	Thr	Phe	Phe	Arg
	50				55				60						
Met	Pro	Glu	Asn	Glu	Ser	Asn	Ser	Leu	Ser	Arg	Lys	Leu	Ser	Lys	Phe

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<210> 3861
<211> 748
<212> DNA
<213> Homo sapiens
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<400> 3861
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120
ggagagggca gctactccaa ggtgaagggtg gccacatcca agaagtacaa gggtagcgtg
180
gccatcaagg tgggtggaccg gcggcgagcg ccccggaact tcgtcaacaa gttcctgcgg
240
cgagagctgt ccatcctgcg gggcgtgcca ccccgcaca tcgtgcacgt ctcgagttc
300
atcgaggtgt gcaacgggaa actgtacatc gtgatggaag cggccgccac cgacctgctg
360
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caagccgtgc agcgcaacgg ggcgcatcccc ggagttcagg cgcgcgacct ctttgcgcag  
 420  
 atcgccggcg cegtgcgcta cctgcacgat catcacctgg tgcaccgcga cctcaagtgc  
 480  
 gaaaacgtgc tgctgagccc ggacgagcgc cgcgtcaage tcaccgactt cggcttcggc  
 540  
 cgccaggccc atggctaccc agacctgagc accacctact gcggctcagc cgtacgcgtc  
 600  
 acccgagtca tgcatttctt gagcacctac tgtctgccag gccccagagc tcatggcgaa  
 660  
 gagacttggg cccatccctg ccgaaaacga gacaattgaa aagtcaagta aaataaaaga  
 720  
 atgacatgga aataaaaaaaaa aaaaaaaaa  
 748

&lt;210&gt; 3862

&lt;211&gt; 210

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3862

Met Ser Gly Asp Lys Leu Leu Ser Glu Leu Gly Tyr Lys Leu Gly Arg  
 1 5 10 15  
 Thr Ile Gly Glu Gly Ser Tyr Ser Lys Val Lys Val Ala Thr Ser Lys  
 20 25 30  
 Lys Tyr Lys Gly Thr Val Ala Ile Lys Val Val Asp Arg Arg Arg Ala  
 35 40 45  
 Pro Pro Asp Phe Val Asn Lys Phe Leu Pro Arg Glu Leu Ser Ile Leu  
 50 55 60  
 Arg Gly Val Arg His Pro His Ile Val His Val Phe Glu Phe Ile Glu  
 65 70 75 80  
 Val Cys Asn Gly Lys Leu Tyr Ile Val Met Glu Ala Ala Ala Thr Asp  
 85 90 95  
 Leu Leu Gln Ala Val Gln Arg Asn Gly Arg Ile Pro Gly Val Gln Ala  
 100 105 110  
 Arg Asp Leu Phe Ala Gln Ile Ala Gly Ala Val Arg Tyr Leu His Asp  
 115 120 125  
 His His Leu Val His Arg Asp Leu Lys Cys Glu Asn Val Leu Leu Ser  
 130 135 140  
 Pro Asp Glu Arg Arg Val Lys Leu Thr Asp Phe Gly Phe Gly Arg Gln  
 145 150 155 160  
 Ala His Gly Tyr Pro Asp Leu Ser Thr Thr Tyr Cys Gly Ser Ala Val  
 165 170 175  
 Arg Val Thr Arg Val Met His Phe Leu Ser Thr Tyr Cys Leu Pro Gly  
 180 185 190  
 Pro Arg Ala His Gly Glu Glu Thr Trp Ala His Pro Cys Arg Lys Arg  
 195 200 205  
 Asp Asn  
 210

&lt;210&gt; 3863

&lt;211&gt; 341

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3863

acgcgtgaag ggggatccag atgctgataa cgaaggccca tcagcaggaa ctctcacag  
 60  
 ctcactttga ggcttcctat tttctttaat cctgggggtac agctcccacc tggacacttc  
 120  
 agttttgctc tcagttggga ctctgggaaa aaaactgtgt ggctgatctc cacgaggttc  
 180  
 ttctggtcga ggctccccga gaaccatctg gccatgggct ggcagccgag ttctcgagc  
 240  
 gtccaggtcg acggtacatt ccaggctagc catcctatca taatcgaatc tgagtagatt  
 300  
 tttatcaatc gcttgggaca agccattgaa ttttcggaga g  
 341

&lt;210&gt; 3864

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3864

Met	Ala	Cys	Pro	Lys	Arg	Leu	Ile	Lys	Ile	Tyr	Ser	Asp	Ser	Ile	Met
1				5				10					15		
Ile	Gly	Trp	Leu	Ala	Trp	Asn	Val	Pro	Ser	Ala	Trp	Thr	Leu	Arg	Glu
		20					25					30			
Leu	Gly	Cys	Gln	Pro	Met	Ala	Arg	Trp	Phe	Ser	Gly	Ser	Leu	Asp	Gln
		35				40					45				
Lys	Asn	Leu	Val	Glu	Ile	Ser	His	Thr	Val	Phe	Phe	Pro	Glu	Ser	Gln
	50					55				60					
Leu	Arg	Ala	Lys	Leu	Lys	Cys	Pro	Gly	Gly	Ser	Cys	Thr	Pro	Gly	Leu
65				70				75					80		
Lys	Lys	Ile	Gly	Ser	Leu	Lys	Val	Ser	Cys	Glu	Glu	Phe	Leu	Leu	Met
		85				90						95			
Gly	Leu	Arg	Tyr	Gln	His	Leu	Asp	Pro	Pro	Ser	Arg				
		100						105							

&lt;210&gt; 3865

&lt;211&gt; 492

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3865

nattgcaaaa caatatatga cacgtctttt accagccaca accttcaaca aaccaatatt  
 60  
 aatcaggaat tgacgataag cttactacat ttgaaatta tctgactttc ctcatgaaat  
 120  
 gagacctatg tgaagccac ttaattttct gaaacttcac atcatgtacc ttcatgttaa  
 180  
 tattctgaca cttgtttcat gcagccatac cagtcacaac tttaaatttt tagtcagact  
 240  
 ttgctcacia gggttcagga taattaatac aaatgggttg ggccagccat cacacagcag  
 300  
 tctctatttt acttcactac aactacagct ttcattcttc attacattac tttttctgag  
 360

tagtctgggt caaatagtagt aaactgaata ttccttaacc aaaatgcttg gaagtaggcc  
 420  
 gggagcagcg gctcaccct gtaatcccag cattttggga ggccaaagca gacagatcac  
 480  
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 492

<210> 3866

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3866

Met	Tyr	Leu	His	Cys	Asn	Ile	Leu	Thr	Leu	Val	Ser	Cys	Ser	His	Thr
1			5					10					15		
Ser	His	Asn	Phe	Lys	Phe	Leu	Val	Arg	Leu	Cys	Ser	Gln	Gly	Phe	Arg
		20				25						30			
Ile	Ile	Asn	Thr	Asn	Gly	Leu	Gly	Gln	Pro	Ser	His	Ser	Ser	Leu	Leu
	35					40					45				
Phe	Thr	Ser	Leu	Gln	Leu	Gln	Leu	Ser	Phe	Phe	Ile	Thr	Leu	Leu	Phe
	50				55						60				
Leu	Ser	Ser	Leu	Gly	Gln	Ile	Val	Gln	Thr	Glu	Tyr	Ser	Leu	Thr	Lys
65				70					75					80	
Met	Leu	Gly	Ser	Arg	Pro	Gly	Ala	Ala	Ala	His	Pro	Cys	Asn	Pro	Ser
			85					90					95		
Ile	Leu	Gly	Gly	Gln	Ser	Arg	Gln	Ile	Thr	Gln	Gly	Gln			
		100					105								

<210> 3867

<211> 1032

<212> DNA

<213> Homo sapiens

<400> 3867

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 120  
 ctggacagtg caaagcgatc ggaggacagg gagaaggag ctctgattga ggagctctta  
 180  
 caggcaaaac aggatcttca agatctgctg attgccaaag aggagcaaga agacctcttg  
 240  
 agaaagcgag agcgtgaact caccgccctg aaggagagccc tgaaagaaga ggtttccagc  
 300  
 catgatcagg agatggacaa gctgaaggag caatatgatg ctgagttgca ggccctgagg  
 360  
 gagagtgtgg aagaagcaac caagaatgtc gaggtcttgg cgagcaggag caacacttca  
 420  
 gacgaagacc aggcggggac tgaaatgcgc gtgaagcttc tgcaggagga gaatgagaag  
 480  
 ctgcagggaa gaagcgaaga gctggagcgg agagttgctc agcttcaaag gcagatcgag  
 540  
 gacctgaaag gcgatgaagc caaggcgaag gaaacgctga agaagtacga gggagaaata  
 600

cgacagttag aggaggccct tgtgcacgcc agaaaggaag aaaaagaagc tgtgtcagcc  
 660  
 agaagggccc tggagaatga actggaggct gctcaggga atctgagtca gactaccag  
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 780  
 aggttgaaga acgagatgga gaatgagcgg tggcacctgg gcaaaacctat tgagaaactg  
 840  
 cagaaggaga tggcagacat tggtgaggcc tcccgtacct caaccctgga gctccagaac  
 900  
 cagctggatg agtataagga gaaaaaccgc agggagctcg cagaaatgca aagacagttg  
 960  
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 1020  
 atgcgtctga tg  
 1032

<210> 3868

<211> 344

<212> PRT

<213> Homo sapiens

<400> 3868

Thr	Arg	Glu	Gly	Glu	Leu	Arg	Lys	Asn	Leu	Glu	Glu	Leu	Phe	Gln	Val
1				5				10						15	
Lys	Met	Glu	Arg	Glu	Gln	His	Gln	Thr	Glu	Ile	Arg	Asp	Leu	Gln	Asp
			20					25					30		
Gln	Leu	Ser	Glu	Met	His	Asp	Glu	Leu	Asp	Ser	Ala	Lys	Arg	Ser	Glu
			35				40					45			
Asp	Arg	Glu	Lys	Gly	Ala	Leu	Ile	Glu	Glu	Leu	Leu	Gln	Ala	Lys	Gln
			50				55				60				
Asp	Leu	Gln	Asp	Leu	Leu	Ile	Ala	Lys	Glu	Glu	Gln	Glu	Asp	Leu	Leu
65					70					75				80	
Arg	Lys	Arg	Glu	Arg	Glu	Leu	Thr	Ala	Leu	Lys	Gly	Ala	Leu	Lys	Glu
				85				90						95	
Glu	Val	Ser	Ser	His	Asp	Gln	Glu	Met	Asp	Lys	Leu	Lys	Glu	Gln	Tyr
			100					105					110		
Asp	Ala	Glu	Leu	Gln	Ala	Leu	Arg	Glu	Ser	Val	Glu	Glu	Ala	Thr	Lys
			115				120					125			
Asn	Val	Glu	Val	Leu	Ala	Ser	Arg	Ser	Asn	Thr	Ser	Glu	Gln	Asp	Gln
			130				135					140			
Ala	Gly	Thr	Glu	Met	Arg	Val	Lys	Leu	Leu	Gln	Glu	Glu	Asn	Glu	Lys
145					150					155				160	
Leu	Gln	Gly	Arg	Ser	Glu	Glu	Leu	Glu	Arg	Arg	Val	Ala	Gln	Leu	Gln
				165				170						175	
Arg	Gln	Ile	Glu	Asp	Leu	Lys	Gly	Asp	Glu	Ala	Lys	Ala	Lys	Glu	Thr
			180					185					190		
Leu	Lys	Lys	Tyr	Glu	Gly	Glu	Ile	Arg	Gln	Leu	Glu	Glu	Ala	Leu	Val
			195					200				205			
His	Ala	Arg	Lys	Glu	Glu	Lys	Glu	Ala	Val	Ser	Ala	Arg	Arg	Ala	Leu
			210				215					220			
Glu	Asn	Glu	Leu	Glu	Ala	Ala	Gln	Gly	Asn	Leu	Ser	Gln	Thr	Thr	Gln
225					230					235				240	
Glu	Gln	Lys	Gln	Leu	Ser	Glu	Lys	Leu	Lys	Glu	Glu	Ser	Glu	Gln	Lys

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<400> 3869
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120
tgatgcacac acattccaga aatgcagagg tatgctgctg ccacggggta ggggtgcggg
180
aggcggcctg gcctcatggc cgcagaccgt gccccagccc gggcctggca ggtagctggc
240
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<211> 100

<212> PRT

<213> Homo sapiens

<400> 3870

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Leu	Leu	Gly	Ser	Gln	Trp	His	Leu	Ser	Val	Ala	Ser	Tyr	Leu	Pro	Gly
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Pro	Gly	Trp	Gly	Thr	Val	Cys	Gly	His	Glu	Ala	Arg	Pro	Pro	Pro	Ala
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<210> 3871

<211> 473

<212> DNA

<213> Homo sapiens

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<210> 3874

<211> 289  
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<400> 3874

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Pro Val Gln Ser Pro Gln Arg Ser Val Asp Ser Ile Ser Gln Glu Ser
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Ser Thr Ser Ser Phe Ser Ser Met Ser Ala Gly Ser Arg Gln Glu Glu
65           70           75           80
Thr Lys Lys Asp Tyr Arg Glu Val Glu Lys Leu Leu Arg Ala Val Ala
          85           90           95
Asp Gly Asp Leu Glu Met Val Arg Tyr Leu Leu Glu Trp Thr Glu Glu
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Asp Leu Glu Asp Ala Glu Asp Thr Val Ser Ala Ala Asp Pro Glu Phe
          115          120          125
Cys His Pro Leu Cys Gln Cys Pro Lys Cys Ala Pro Ala Gln Lys Arg
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Asp Gly Ser Ser Pro Leu His Val Ala Ala Leu His Gly Arg Ala Asp
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Leu Ile Arg Leu Leu Leu Lys His Gly Ala Asn Ala Gly Ala Arg Asn
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Ala Asp Gln Ala Val Pro Leu His Leu Ala Cys Gln Gln Gly His Phe
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Gln Val Val Lys Cys Leu Leu Asp Ser Asn Ala Lys Pro Asn Lys Lys
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Asp Leu Ser Gly Asn Thr Pro Leu Ile Tyr Ala Cys Ser Gly Gly His
          225          230          235          240Glu Leu
Val Ala Leu Leu Leu Gln His Gly Ala Ser Ile Asn Ala
          245          250          255
Leu Thr Ile Arg Gly Asn Thr Ala Leu His Glu Ala Val Ile Glu Lys
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<400> 3875

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&lt;210&gt; 3876

&lt;211&gt; 824

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3876

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			20					25					30		
Pro	Pro	Ala	Ala	Leu	Gly	Leu	Val	Ser	Ser	Arg	Thr	Ser	Gly	Ala	Val
		35				40						45			
Pro	Pro	Lys	Glu	Glu	Glu	Leu	Arg	Ala	Ala	Val	Glu	Val	Leu	Arg	Gly
		50				55					60				
His	Gly	Leu	His	Ser	Val	Leu	Glu	Glu	Trp	Phe	Val	Glu	Val	Leu	Gln
65				70					75					80	
Asn	Asp	Leu	Gln	Ala	Asn	Ile	Ser	Pro	Glu	Phe	Trp	Asn	Ala	Ile	Ser
			85						90					95	
Gln	Cys	Glu	Asn	Ser	Ala	Asp	Glu	Pro	Gln	Cys	Leu	Leu	Leu	Leu	Leu
			100					105						110	
Asp	Ala	Phe	Gly	Leu	Leu	Glu	Ser	Arg	Leu	Asp	Pro	Tyr	Leu	Arg	Ser
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Tyr Gly Cys Phe Leu Arg Val Tyr Met Gln Ser Lys Arg Lys Gly Glu		175
	180	185
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Arg Arg Arg Tyr Tyr Arg Leu Leu Gln Ser Pro Leu Cys Ala Gly Cys		205
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Ser Ser Asp Lys Gln Gln Cys Trp Cys Arg Gln Ala Leu Glu Gln Phe		220
	225	230
His Gln Leu Ser Gln Val Leu His Arg Leu Ser Leu Leu Glu Arg Val		235
	245	250
Ser Ala Glu Ala Val Thr Thr Thr Leu His Gln Val Thr Arg Glu Arg		255
	260	265
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	275	280
Phe His Arg Trp Ile Glu Arg Val Val Gly Trp Leu Gly Lys Val Phe		285
	290	295
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	305	310
Leu Arg Arg Trp Arg Cys His Val Gln Arg Phe Phe Tyr Arg Ile Tyr		315
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Ala Ser Leu Arg Ile Glu Glu Leu Phe Ser Ile Val Arg Asp Phe Pro		335
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Asp Ser Arg Pro Ala Ile Glu Asp Leu Lys Tyr Cys Leu Glu Arg Thr		350
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Asp Gln Arg Gln Gln Leu Leu Val Ser Leu Lys Ala Ala Leu Glu Thr		365
	370	375
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	385	390
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	405	410
Leu Glu Val Ala Cys Glu Pro Ile Arg Arg Tyr Leu Arg Thr Arg Glu		415
	420	425
Asp Thr Val Arg Gln Ile Val Ala Gly Leu Thr Gly Asp Ser Asp Gly		430
	435	440
Thr Gly Asp Leu Ala Val Glu Leu Ser Lys Thr Asp Pro Ala Ser Leu		445
	450	455
Glu Thr Gly Gln Asp Ser Glu Asp Asp Ser Gly Glu Pro Glu Asp Trp		460
	465	470
Val Pro Asp Pro Val Asp Ala Asp Pro Gly Lys Ser Ser Ser Lys Arg		475
	485	490
Arg Ser Ser Asp Ile Ile Ser Leu Leu Val Ser Ile Tyr Gly Ser Lys		495
	500	505
Asp Leu Phe Ile Asn Glu Tyr Arg Ser Leu Leu Ala Asp Arg Leu Leu		510
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His Gln Phe Ser Phe Ser Pro Glu Arg Glu Ile Arg Asn Val Glu Leu		525
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Leu Lys Leu Arg Phe Gly Glu Ala Pro Met His Phe Cys Glu Val Met		540
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Leu Lys Asp Met Ala Asp Ser Arg Arg Ile Asn Ala Asn Ile Arg Glu		555
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&lt;210&gt; 3877

&lt;211&gt; 1112

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3877

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<210> 3878

<211> 370

<212> PRT

<213> Homo sapiens

<400> 3878

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Lys	Ser	Leu	Ser	Leu	Ser	Ala	Lys	Thr	His	Asn	Ile	Gly	Phe	Asp	Lys
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Ser	Lys	Asp	Thr	Arg	Glu	Ile	Lys	Thr	Asp	Phe	Ser	Leu	Ser	Ile	Ser
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Asn	Ser	Ser	Asp	Val	Ser	Ala	Lys	Asp	Lys	His	Ala	Glu	Asp	Asn	Glu
			145					150					155		160
Lys	Arg	Leu	Ala	Ala	Leu	Glu	Ala	Arg	Gln	Lys	Ala	Lys	Glu	Val	Gln
			165					170					175		
Lys	Lys	Leu	Val	His	Asn	Ala	Leu	Ala	Asn	Leu	Asp	Gly	His	Pro	Glu

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&lt;210&gt; 3879

&lt;211&gt; 2769

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3879

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<210> 3880

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3880

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			20					25					30		
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			35				40					45			
Thr	Ala	Leu	Pro	Ala	Leu	Glu	Thr	Ile	Asn	Leu	Glu	Glu	Asn	Glu	Ile
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Ile	Asn	Leu	Arg	Phe	Asn	Pro	Leu	Asn	Ala	Glu	Val	Arg	Val	Ile	Ala
			85					90						95	
Pro	Pro	Leu	Ile	Lys	Phe	Asp	Met	Leu	Met	Ser	Pro	Glu	Gly	Ala	Arg
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Ala	Pro	Leu	Pro												
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<210> 3881

<211> 1393

<212> DNA

<213> Homo sapiens

<400> 3881

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&lt;210&gt; 3882

&lt;211&gt; 277

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3882

Asp	Leu	Gly	Pro	Trp	Ser	Gln	Tyr	Ala	Pro	Pro	Glu	Trp	Ser	Gln	Gly
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			20					25					30		
Gln	Met	Pro	Ser	Leu	Asn	Trp	Pro	Glu	Ala	Leu	Pro	Pro	Pro	Pro	Pro

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 Ser Ser Glu Pro Glu Glu Trp Cys Pro Pro Met Pro Glu Arg Ser His  
 65 70 75 80  
 Leu Thr Glu Pro Ser Ser Ser Gly Gly Trp Leu Val Thr Pro Ser Arg  
 85 90 95  
 Arg Glu Thr Pro Ser Pro Thr Pro Ser Tyr Gly Gln Gln Ser Thr Ala  
 100 105 110  
 Thr Leu Thr Pro Ser Pro Pro Asp Pro Pro Gln Pro Pro Thr Asp Met  
 115 120 125  
 Pro His Leu His Gln Met Pro Arg Arg Val Pro Leu Gly Pro Ser Ser  
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 Pro Leu Ser Val Ser Gln Pro Met Leu Gly Ile Arg Glu Ala Arg Pro  
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 Ala Gly Leu Gly Ala Gly Pro Ala Ala Ser Pro His Leu Ser Pro Ser  
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 Pro Ala Pro Ser Thr Ala Ser Ser Ala Pro Gly Arg Thr Trp Gln Gly  
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 Lys Lys Pro Lys Ala Leu Pro Tyr Arg Arg Glu Asn Ser Pro Gly Asp  
 210 215 220  
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 225 230 235 240  
 Pro Arg Ala Glu Gly Ser Arg Gln His Val Leu Pro Gly Ala Gly Ala  
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 Gly Ala Pro Pro Arg  
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&lt;210&gt; 3883

&lt;211&gt; 943

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3883

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<210> 3884

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3884

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Lys	Ala	Arg	Arg	Arg	Thr	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
			35				40					45			
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser
			50				55					60			
Asp	Gly	Arg	Lys	Lys	Arg	Gly	Lys	Tyr	Lys	Asp	Lys	Arg	Arg	Lys	Lys
65					70					75				80	
Lys	Lys	Lys	Arg	Lys	Lys	Leu	Lys	Lys	Lys	Gly	Lys	Glu	Lys	Ala	Glu
				85					90					95	
Ala	Gln	Gln	Val	Glu	Ala	Leu	Pro	Gly	Pro	Ser	Leu	Asp	Gln	Trp	His
			100					105					110		
Arg	Ser	Ala	Gly	Glu	Glu	Glu	Asp	Gly	Pro	Val	Leu	Thr	Asp	Glu	Gln
			115				120					125			
Val	Pro	Asn	Pro	Gly	His	Glu	Ala	His	Asp	Gln	Gly	Gly	Trp	Asp	Ala
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Arg	Gln	Ser	Val	Ile	Arg	Lys	Val	Val	Asp	Pro	Glu	Thr	Gly	Arg	Thr
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Arg	Leu	Ile	Lys	Gly	Asp	Gly	Glu	Val	Leu	Glu	Glu	Ile	Val	Thr	Lys
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Glu	Arg	His	Arg	Glu	Ile	Asn	Lys	Val	Gly	Val	Ala	Pro	Leu	Pro	Ala
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<210> 3885

<211> 1671

<212> DNA

<213> Homo sapiens

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<210> 3886

<211> 277

<212> PRT

<213> Homo sapiens

<400> 3886

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 Gly Ala Gly Gly Ser Ile Thr Ser Val Asp Phe Asp Pro Ser Gly Tyr  
 35 40 45  
 Gln Val Leu Ala Ala Thr Tyr Asn Gln Ala Ala Gln Leu Trp Lys Val  
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 Gly Glu Ala Gln Ser Lys Glu Thr Leu Ser Gly His Lys Asp Lys Val  
 65 70 75 80  
 Thr Ala Ala Lys Phe Lys Leu Thr Arg His Gln Ala Val Thr Gly Ser  
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 Arg Asp Arg Thr Val Lys Glu Trp Asp Leu Gly Arg Ala Tyr Cys Ser  
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 Pro Tyr His His Xaa Ser Gly His Asn Asp Gln Lys Ile Arg Phe Trp  
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 Asp Ser Xaa Gly Gly Pro Thr Ala Pro Arg Ser Ser Leu Xaa Gln Gly  
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 Arg Val Thr Ser Leu Ser Leu Ser Xaa Arg Pro Thr Xaa His Leu Leu  
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<210> 3887

<211> 5612

<212> DNA

<213> Homo sapiens

<400> 3887

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&lt;210&gt; 3888

&lt;211&gt; 1230

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3888

Met	Ala	Ser	Ala	Ser	Tyr	His	Ile	Ser	Asn	Leu	Leu	Glu	Lys	Met	Thr
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Glu	Leu	Gln	Lys	Asp	Ser	Ile	Lys	Leu	Asp	Asp	Asp	Ser	Glu	Arg	Lys
		35					40					45			
Val	Val	Lys	Met	Ile	Leu	Lys	Leu	Leu	Glu	Asp	Lys	Asn	Gly	Glu	Val
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Gln	Asn	Leu	Ala	Val	Lys	Cys	Leu	Gly	Pro	Leu	Val	Ser	Lys	Val	Lys
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Glu	Tyr	Gln	Val	Glu	Thr	Ile	Val	Asp	Thr	Leu	Cys	Thr	Asn	Met	Leu
			85					90					95		
Ser	Asp	Lys	Glu	Gln	Leu	Arg	Asp	Ile	Ser	Ser	Ile	Gly	Leu	Lys	Thr
		100						105					110		
Val	Ile	Gly	Glu	Leu	Pro	Pro	Ala	Ser	Ser	Gly	Ser	Ala	Leu	Ala	Ala
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Asn	Val	Cys	Lys	Lys	Ile	Thr	Gly	Arg	Leu	Thr	Ser	Ala	Ile	Ala	Lys
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Gln	Glu	Asp	Val	Ser	Val	Gln	Leu	Glu	Ala	Leu	Asp	Ile	Met	Ala	Asp
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Met	Leu	Ser	Arg	Gln	Gly	Gly	Leu	Leu	Val	Asn	Phe	His	Pro	Ser	Ile

3035

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Pro Asn Thr Leu Gln Ile Phe Leu Glu Arg Leu Lys Asn Glu Ile Thr		
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Arg Leu Thr Thr Val Lys Ala Leu Thr Leu Ile Ala Gly Ser Pro Leu		
625	630	635
Lys Ile Asp Leu Arg Pro Val Leu Gly Glu Gly Val Pro Ile Leu Ala		
645	650	655
Ser Phe Leu Arg Lys Asn Gln Arg Ala Leu Lys Leu Gly Thr Leu Ser		
660	665	670
Ala Leu Asp Ile Leu Ile Lys Asn Tyr Ser Asp Ser Leu Thr Ala Ala		
675	680	685
Met Ile Asp Ala Val Leu Asp Glu Leu Pro Pro Leu Ile Ser Glu Ser		
690	695	700
Asp Met His Val Ser Gln Met Ala Ile Ser Phe Leu Thr Thr Leu Ala		
705	710	715
Lys Val Tyr Pro Ser Ser Leu Ser Lys Ile Ser Gly Ser Ile Leu Asn		
725	730	735
Glu Leu Ile Gly Leu Val Arg Ser Pro Leu Leu Gln Gly Gly Ala Leu		
740	745	750
Ser Ala Met Leu Asp Phe Phe Gln Ala Leu Val Val Thr Gly Thr Asn		
755	760	765
Asn Leu Gly Tyr Met Asp Leu Leu Arg Met Leu Thr Gly Pro Val Tyr		
770	775	780
Ser Gln Ser Thr Ala Leu Thr His Lys Gln Ser Tyr Tyr Ser Ile Ala		
785	790	795
Lys Cys Val Ala Ala Leu Thr Arg Ala Cys Pro Lys Glu Gly Pro Ala		
805	810	815
Val Val Gly Gln Phe Ile Gln Asp Val Lys Asn Ser Arg Ser Thr Asp		
820	825	830
Ser Ile Arg Leu Leu Ala Leu Leu Ser Leu Gly Glu Val Gly His His		
835	840	845
Ile Asp Leu Ser Gly Gln Leu Glu Leu Lys Ser Val Ile Leu Glu Ala		
850	855	860
Phe Ser Ser Pro Ser Glu Glu Val Lys Ser Ala Ala Ser Tyr Ala Leu		
865	870	875
Gly Ser Ile Ser Val Gly Asn Leu Pro Glu Tyr Leu Pro Phe Val Leu		
885	890	895
Gln Glu Ile Thr Ser Gln Pro Lys Arg Gln Tyr Leu Leu Leu His Ser		
900	905	910
Leu Lys Glu Ile Ile Ser Ser Ala Ser Val Val Gly Leu Lys Pro Tyr		
915	920	925
Val Glu Asn Ile Trp Ala Leu Leu Leu Lys His Cys Glu Cys Ala Glu		
930	935	940
Glu Gly Thr Arg Asn Val Val Ala Glu Cys Leu Gly Lys Leu Thr Leu		
945	950	955
Ile Asp Pro Glu Thr Leu Leu Pro Arg Leu Lys Gly Tyr Leu Ile Ser		
965	970	975
Gly Ser Ser Tyr Ala Arg Ser Ser Val Val Thr Ala Val Lys Phe Thr		
980	985	990
Ile Ser Asp His Pro Gln Pro Ile Asp Pro Leu Leu Lys Asn Cys Ile		
995	1000	1005
Gly Asp Phe Leu Lys Thr Leu Glu Asp Pro Asp Leu Asn Val Arg Arg		
1010	1015	1020
Val Ala Leu Val Thr Phe Asn Ser Ala Ala His Asn Lys Pro Ser Leu		

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 Ile Arg Asp Leu Leu Asp Thr Val Leu Pro His Leu Tyr Asn Glu Thr  
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 Lys Val Arg Lys Lys Glu Leu Ile Arg Glu Val Glu Met Gly Pro Phe Lys  
                                  1060                      1065                      1070  
 His Thr Val Asp Asp Gly Leu Asp Ile Arg Lys Ala Ala Phe Glu Cys  
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 Met Tyr Thr Leu Leu Asp Ser Cys Leu Asp Arg Leu Asp Ile Phe Glu  
                                  1090                      1095                      1100  
 Phe Leu Asn His Val Glu Asp Gly Leu Lys Asp His Tyr Asp Ile Lys  
 1105                      1110                      1115                      1120  
 Met Leu Thr Phe Leu Met Leu Val Arg Leu Ser Thr Leu Cys Pro Ser  
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 Ala Val Leu Gln Arg Leu Asp Arg Leu Val Glu Pro Leu Arg Ala Thr  
                                  1140                      1145                      1150  
 Cys Thr Thr Lys Val Lys Ala Asn Ser Val Lys Gln Glu Phe Glu Lys  
                                  1155                      1160                      1165  
 Gln Asp Glu Leu Lys Arg Ser Ala Met Arg Ala Val Ala Ala Leu Leu  
                                  1170                      1175                      1180  
 Thr Ile Pro Glu Ala Glu Lys Ser Pro Leu Met Ser Glu Phe Gln Ser  
 1185                      1190                      1195                      1200  
 Gln Ile Ser Ser Asn Pro Glu Leu Ala Ala Ile Phe Glu Ser Ile Gln  
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 Lys Asp Ser Ser Ser Thr Asn Leu Glu Ser Met Asp Thr Ser  
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&lt;210&gt; 3889

&lt;211&gt; 556

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3889

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&lt;210&gt; 3890

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 <213> Homo sapiens

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 His Glu Ala His Asp Gln Gly Gly Trp Asp Ala Arg Gln Ser Ile Ile  
 35 40 45  
 Arg Lys Val Val Asp Pro Glu Thr Gly Arg Thr Arg Leu Ile Lys Gly  
 50 55 60  
 Asp Gly Glu Val Leu Glu Glu Ile Val Thr Lys Glu Arg His Arg Glu  
 65 70 75 80  
 Ile Asn Lys Gln Ala Thr Arg Gly Asp Cys Leu Ala Phe Gln Met Arg  
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 Ala Gly Leu Leu Pro  
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 <213> Homo sapiens

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&lt;210&gt; 3892

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3892

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Ser	Pro	Asn	Trp	Gln	His	Gln	Thr	Gly	His	Gly	Thr	Glu	Ser	Ser	Gly
		20					25					30			
Ser	Gly	Leu	Phe	Ala	Leu	Cys	Thr	Leu	Asp	Gly	Thr	Leu	Lys	Leu	Met
		35				40					45				
Glu	Glu	Met	Glu	Glu	Ala	Asp	Lys	Leu	Leu	Trp	Ser	Val	Gln	Val	Asp
		50				55				60					
His	Gln	Leu	Phe	Ala	Leu	Glu	Lys	Leu	Asp	Val	Thr	Gly	Asn	Gly	His
65				70					75					80	
Glu	Glu	Val	Val	Ala	Cys	Ala	Trp	Asp	Gly	Gln	Thr	Tyr	Ile	Ile	Asp
		85					90						95		
His	Asn	Arg	Thr	Val	Val	Arg	Phe	Gln	Val	Asp	Glu	Asn	Ile	Arg	Ala
		100					105					110			
Phe	Cys	Ala	Gly	Leu	Tyr	Ala	Cys	Lys	Glu	Gly	Arg	Asn	Ser	Pro	Cys
		115				120					125				
Leu	Val	Tyr	Val	Thr	Phe	Asn	Gln	Lys	Ile	Tyr	Val	Tyr	Trp	Glu	Val

130                      135                      140  
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 Thr Ser Leu

<210> 3893  
 <211> 1591  
 <212> DNA  
 <213> Homo sapiens

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 1591

&lt;210&gt; 3894

&lt;211&gt; 334

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3894

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		20						25					30		
Gly	Glu	Ser	Phe	Val	Met	Tyr	Tyr	Lys	Ser	Lys	Glu	Asn	Cys	Val	Val
		35					40					45			
Asp	Asn	Ile	Lys	Val	Cys	Ser	Asn	Asp	Thr	Gly	Ser	Gly	Lys	Phe	Lys
	50					55					60				
Cys	Val	Cys	Ile	Thr	Met	Arg	Val	Pro	Arg	Asn	Pro	Thr	Ile	Gly	Asp
65					70					75				80	
Lys	Phe	Ala	Ser	Arg	His	Gly	Gln	Lys	Gly	Ile	Leu	Ser	Arg	Leu	Trp
				85					90					95	
Pro	Ala	Glu	Asp	Met	Pro	Phe	Thr	Glu	Ser	Gly	Met	Val	Pro	Asp	Ile
			100					105					110		
Leu	Phe	Asn	Pro	His	Gly	Phe	Pro	Ser	Arg	Met	Thr	Ile	Gly	Met	Leu
		115					120						125		
Ile	Glu	Ser	Met	Ala	Gly	Lys	Ser	Ala	Ala	Leu	His	Gly	Leu	Cys	His
	130					135					140				
Asp	Ala	Thr	Pro	Phe	Ile	Phe	Ser	Glu	Glu	Asn	Ser	Ala	Leu	Glu	Tyr
145					150					155				160	
Phe	Gly	Glu	Met	Leu	Lys	Ala	Ala	Gly	Tyr	Asn	Phe	Tyr	Gly	Thr	Glu
			165					170					175		
Arg	Leu	Tyr	Ser	Gly	Ile	Ser	Gly	Leu	Glu	Leu	Glu	Ala	Asp	Ile	Phe
			180					185					190		
Ile	Gly	Val	Val	Tyr	Tyr	Gln	Arg	Leu	Arg	His	Met	Val	Ser	Asp	Lys
		195					200					205			
Phe	Gln	Val	Arg	Thr	Thr	Gly	Ala	Arg	Asp	Arg	Val	Thr	Asn	Gln	Pro
	210					215					220				
Ile	Gly	Gly	Arg	Asn	Val	Gln	Gly	Gly	Ile	Arg	Phe	Gly	Glu	Met	Glu
225				230					235					240	
Arg	Asp	Ala	Leu	Leu	Ala	His	Gly	Thr	Ser	Phe	Leu	Leu	His	Asp	Arg
			245					250					255		
Leu	Phe	Asn	Cys	Ser	Asp	Arg	Ser	Val	Ala	His	Val	Cys	Val	Lys	Cys

3042

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<210> 3896

<211> 346

<212> PRT

<213> Homo sapiens

<400> 3896

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Leu	Lys	Gln	His	Lys	Glu	Ala	Lys	Arg	Phe	Glu	Ile	Ala	Arg	Ser	Gln
			20					25					30		
Pro	Glu	Asp	Thr	Pro	Glu	Asn	Thr	Val	Arg	Arg	Gln	Glu	Gln	Pro	Ser
		35					40					45			
Ile	Glu	Ser	Thr	Ser	Pro	Ile	Ser	Arg	Thr	Asp	Glu	Ile	Arg	Lys	Asn
	50					55				60					
Thr	Tyr	Arg	Thr	Leu	Asp	Ser	Leu	Glu	Gln	Thr	Ile	Lys	Gln	Leu	Glu
65				70						75				80	
Asn	Thr	Ile	Ser	Glu	Met	Ser	Pro	Lys	Ala	Leu	Val	Asp	Thr	Ser	Cys
			85					90					95		
Ser	Ser	Asn	Arg	Asp	Ser	Val	Ala	Ser	Ser	Ser	His	Ile	Ala	Gln	Glu
		100						105					110		
Ala	Ser	Pro	Arg	Pro	Leu	Leu	Val	Pro	Asp	Glu	Gly	Pro	Thr	Ala	Leu
		115					120					125			
Glu	Pro	Pro	Thr	Ser	Ile	Pro	Ser	Ala	Ser	Arg	Lys	Gly	Ser	Ser	Gly
	130					135					140				
Ala	Pro	Gln	Thr	Ser	Arg	Met	Pro	Val	Pro	Met	Ser	Ala	Lys	Asn	Arg
145				150						155				160	
Pro	Gly	Thr	Leu	Asp	Lys	Pro	Gly	Lys	Gln	Ser	Lys	Leu	Gln	Asp	Pro
			165					170					175		
Arg	Gln	Tyr	Arg	Gln	Ala	Asn	Gly	Ser	Ala	Lys	Lys	Ser	Gly	Gly	Asp
		180					185						190		
Phe	Lys	Pro	Thr	Ser	Pro	Ser	Leu	Pro	Ala	Ser	Lys	Ile	Pro	Ala	Leu
	195						200					205			
Ser	Pro	Ser	Ser	Gly	Lys	Ser	Ser	Ser	Leu	Pro	Ser	Ser	Ser	Gly	Asp
	210					215				220					
Ser	Ser	Asn	Leu	Pro	Asn	Pro	Pro	Ala	Thr	Lys	Pro	Ser	Ile	Ala	Ser
225				230						235				240	
Asn	Pro	Leu	Ser	Pro	Gln	Thr	Gly	Pro	Pro	Ala	His	Ser	Ala	Ser	Leu
			245					250					255		
Ile	Pro	Ser	Val	Ser	Asn	Gly	Ser	Leu	Lys	Phe	Gln	Ser	Leu	Thr	His
		260					265					270			
Thr	Gly	Lys	Gly	His	His	Leu	Ser	Phe	Ser	Pro	Gln	Ser	Gln	Asn	Gly
	275						280					285			
Arg	Ala	Pro	Pro	Pro	Leu	Ser	Phe	Ser	Ser	Ser	Pro	Pro	Ser	Pro	Ala
	290					295					300				
Ser	Ser	Val	Ser	Leu	Asn	Gln	Gly	Ala	Lys	Gly	Thr	Arg	Thr	Ile	His
305				310						315				320	
Thr	Pro	Ser	Leu	Thr	Ser	Tyr	Lys	Ala	Gln	Asn	Gly	Ser	Ser	Ser	Lys
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Ala	Thr	Pro	Ser	Thr	Ala	Lys	Glu	Thr	Ser						

340

345

<210> 3897  
 <211> 366  
 <212> DNA  
 <213> Homo sapiens

<400> 3897  
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 240  
 cctcagtac ctctctctt cgtggctctc accccacact ctgccactgc cacattttcc  
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 360  
 ggtccc  
 366

<210> 3898  
 <211> 111  
 <212> PRT  
 <213> Homo sapiens

<400> 3898  
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 His Pro Arg Phe Val His Glu Trp Lys Ala Met Leu Thr Ala Ala Gln  
 35 40 45  
 Cys Val Gln Asp Val Ser Glu Thr Pro Val Pro Leu Pro Val Pro Leu  
 50 55 60  
 Ser Val Pro Leu Ser Thr Ser Val Thr Ser Ser Leu Arg Gly Ser His  
 65 70 75 80  
 Pro Thr Leu Cys His Cys His Ile Phe Leu Cys Ala Gln Pro Leu Pro  
 85 90 95  
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<210> 3899  
 <211> 1092  
 <212> DNA  
 <213> Homo sapiens

<400> 3899  
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 240  
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 420  
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<210> 3900

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3900

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Pro	Ser	Glu	Arg	Arg	Glu	Val	Arg	Val	Pro	Pro	Pro	His	Leu	Gln	Arg
			20					25					30		
Gly	Arg	Ser	Gly	Leu	Glu	Pro	Gly	Thr	Phe	Arg	Lys	Met	Ala	Ala	Ala
			35				40					45			
Arg	Pro	Ser	Leu	Gly	Arg	Val	Leu	Pro	Gly	Ser	Ser	Val	Leu	Phe	Leu
			50			55					60				
Cys	Asp	Met	Gln	Glu	Lys	Phe	Arg	His	Asn	Ile	Ala	Tyr	Phe	Pro	Gln
65					70					75				80	
Ile	Val	Ser	Val	Ala	Ala	Arg	Met	Leu	Lys	Val	Ala	Arg	Leu	Leu	Glu
				85					90					95	
Val	Pro	Val	Met	Leu	Thr	Glu	Gln	Tyr	Pro	Gln	Gly	Leu	Gly	Pro	Thr

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Val Pro Glu Leu Gly Thr Xaa Gly Pro Ser Ala Ala Gly Gln Asp Leu
          115          120          125
Leu Gln His Gly Ala Cys Leu Gln Gln Glu Leu Asp Ser Arg Pro Gln
          130          135          140
Leu Arg Ser Val Leu Leu Cys Gly Ile Glu Ala Gln Ala Cys Ile Leu
145          150          155          160
Asn Thr Thr Leu Asp Leu Leu Asp Arg Gly Leu Gln Val His Val Val
          165          170          175
Val Asp Ala Cys Ser Ser Arg Ser Gln Val Asp Arg Leu Val Ala Leu
          180          185          190
Ala Arg Met Arg Gln Ser Gly Ala Phe Leu Ser Thr Ser Glu Gly Leu
          195          200          205
Ile Leu Gln Leu Val Gly Asp Ala Val His Pro Gln Phe Lys Glu Ile
          210          215          220
Gln Lys Leu Ile Lys Glu Pro Ala Pro Asp Ser Gly Leu Leu Gly Leu
225          230          235          240
Phe Gln Gly Gln Asn Ser Leu Leu His
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&lt;210&gt; 3901

&lt;211&gt; 1287

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3901

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840

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 1287

&lt;210&gt; 3902

&lt;211&gt; 312

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3902

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 Val His Pro Glu Met Pro Pro Gly Val Arg Leu Ser Arg Gly Leu Val  
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 Trp Ala Ala Thr Thr Ala Arg Asn Ala Leu Val Val Ser Phe Ala Ala  
 35 40 45  
 Leu Val Ala Tyr Ser Phe Glu Val Thr Gly Tyr Gln Pro Phe Ile Leu  
 50 55 60  
 Thr Gly Glu Thr Ala Glu Gly Leu Pro Pro Val Arg Ile Pro Pro Phe  
 65 70 75 80  
 Ser Val Thr Thr Ala Asn Gly Thr Ile Ser Phe Thr Glu Met Val Gln  
 85 90 95  
 Asp Met Gly Ala Gly Leu Ala Val Val Pro Leu Met Gly Leu Leu Glu  
 100 105 110  
 Ser Ile Ala Val Ala Lys Ala Phe Ala Ser Gln Asn Asn Tyr Arg Ile  
 115 120 125  
 Asp Ala Asn Gln Glu Leu Leu Ala Ile Gly Leu Thr Asn Met Leu Gly  
 130 135 140  
 Ser Leu Val Ser Ser Tyr Pro Val Thr Gly Ser Phe Gly Arg Thr Ala  
 145 150 155 160  
 Val Asn Ala Gln Ser Gly Val Cys Thr Pro Ala Gly Gly Leu Val Thr  
 165 170 175  
 Gly Val Leu Val Leu Leu Ser Leu Asp Tyr Leu Thr Ser Leu Phe Tyr  
 180 185 190  
 Tyr Ile Pro Lys Ser Ala Leu Ala Val Ile Ile Met Ala Val Ala  
 195 200 205  
 Pro Leu Phe Asp Thr Lys Ile Phe Arg Thr Leu Trp Arg Val Lys Arg  
 210 215 220  
 Leu Asp Leu Leu Pro Leu Cys Val Thr Phe Leu Leu Cys Phe Trp Glu  
 225 230 235 240  
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<210> 3903
<211> 598
<212> DNA
<213> Homo sapiens
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<210> 3904
<211> 199
<212> PRT
<213> Homo sapiens
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3048

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      115              120              125
Arg Pro Val Val Leu Ala Ala Gly Ala Ala Ala Tyr Ala Asp Thr Lys
      130              135              140
Leu Ala Asn Val Leu Phe Ala Arg Glu Leu Ala Asn Gln Leu Glu Ala
      145              150              155              160
Thr Gly Val Thr Cys Tyr Ala Ala His Pro Gly Pro Val Asn Ser Glu
      165              170              175
Leu Phe Leu Arg His Val Pro Gly Trp Leu Arg Pro Leu Leu Arg Pro
      180              185              190
Leu Ala Trp Leu Val Pro Arg
      195

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<210> 3905  
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 <212> DNA  
 <213> Homo sapiens

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<400> 3905
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370

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<210> 3906  
 <211> 123  
 <212> PRT  
 <213> Homo sapiens

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20     25     30
Asn Ile Gly Gly Asp Phe Asp Val Ala Thr Gly Gln Phe Arg Cys Arg
35     40     45
Val Pro Gly Ala Tyr Phe Phe Ser Phe Thr Ala Gly Lys Ala Pro His
50     55     60
Lys Ser Pro Ser Val Met Leu Val Arg Asn Arg Asp Glu Val Gln Ala
65     70     75     80
Leu Ala Phe Asp Glu Gln Arg Arg Pro Gly Ala Arg Arg Ala Ala Ser

```

	85		90		95										
Gln	Ser	Ala	Met	Leu	Gln	Leu	Asp	Tyr	Gly	Asp	Thr	Val	Trp	Leu	Arg
	100						105						110		
Leu	His	Gly	Ala	Pro	Gln	Tyr	Ala	Leu	Gly	Ala					
	115						120								

&lt;210&gt; 3907

&lt;211&gt; 4474

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3907

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Phe Asp Pro Phe Leu Tyr Leu Pro Val Pro Leu Pro Gln Lys Gln Lys		720
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Arg	Leu	Arg	Phe	Ser	Leu	Ser	Gln	Tyr	Leu	Asp	Gly	Pro	Glu	Pro	Ser
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Ala Arg Arg Gln Arg Arg His Pro Glu Leu Ser Gln Gly Glu Ala Val		
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Phe Arg Asn Glu Ser His Val Ser Cys Gln Cys Asn His Met Thr Ser		
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Pro Glu Glu Arg	Leu Arg Glu Asn	Gly Asp Ala Leu	Ser Arg Glu Gly			
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Pro Pro Glu Met Glu Leu Leu Lys Phe Phe Arg Pro Glu Asn Ile Thr		1280
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Val Ser Ser Arg Pro Ser Val Glu Gln Leu Ser Ser Leu Ile Lys Thr		
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Ser Leu His Tyr Pro Glu Ser Phe Asn His Pro Phe His Gln Lys Ser		
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Leu Cys Leu Val Pro Val Thr Leu Leu Leu Ser Asn Cys Ser Lys Ala		
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Asp Val Asp Val Ile Val Asp Leu Arg His Lys Thr Thr Ser Pro Glu		
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Ala Leu Glu Ile His Gly Ser Phe Thr Trp Leu Gly Gln Thr Gln Tyr		1360
1365	1370	1375
Lys Leu Gln Leu Lys Ser Gln Glu Ile His Ser Leu Gln Leu Lys Ala		
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Cys Phe Val His Thr Gly Val Tyr Asn Leu Gly Thr Pro Arg Val Phe		
1395	1400	1405
Ala Lys Leu Ser Asp Gln Val Thr Val Phe Glu Thr Ser Gln Gln Asn		
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Ser Met Pro Ala Leu Ile Ile Ile Ser Asn Val		
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&lt;210&gt; 3915

&lt;211&gt; 1802

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3915

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 <213> Homo sapiens

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 Glu Thr Asn Thr Glu Thr Pro Ala Pro Ser Pro Thr Val Val Arg Pro  
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 Tyr Val Cys Arg Leu Asn Arg Ser Asp Ser Asp Ser Ser Thr Leu Ser  
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 Lys Lys Pro Pro Phe Val Arg Asn Ser Leu Glu Arg Arg Ser Val Arg  
 180 185 190  
 Met Lys Arg Pro Ser Pro Pro Pro Gln Pro Ser Ser Val Lys Ser Leu  
 195 200 205  
 Arg Ser Glu Arg Leu Ile Arg Thr Ser Leu Asp Leu Glu Leu Asp Leu  
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 Gln Ala Thr Arg Thr Trp His Ser Gln Leu Thr Gln Glu Ile Ser Val  
 225 230 235 240  
 Leu Lys Glu Leu Lys Glu Gln Leu Glu Gln Ala Lys Ser His Gly Glu  
 245 250 255  
 Lys Glu Leu Pro Gln Trp Leu Arg Glu Asp Glu Arg Phe Arg Leu Leu  
 260 265 270  
 Leu Arg Met Leu Glu Lys Arg Gln Met Asp Arg Ala Glu His Lys Gly  
 275 280 285  
 Glu Leu Gln Thr Asp Lys Met Met Arg Ala Ala Ala Lys Asp Val His  
 290 295 300  
 Arg Leu Arg Gly Gln Ser Cys Lys Glu Pro Pro Glu Val Gln Ser Phe  
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 Arg Glu Lys Met Ala Phe Phe Thr Arg Pro Arg Met Asn Ile Pro Ala

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Leu Ser Ala Asp Asp Val  
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<210> 3917  
<211> 597  
<212> DNA  
<213> Homo sapiens

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480  
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<210> 3918  
<211> 152  
<212> PRT  
<213> Homo sapiens

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35 40 45  
Met Glu Glu Val Leu Leu Leu Gly Leu Lys Asp Lys Glu Gly Tyr Thr  
50 55 60  
Ser Phe Trp Asn Asp Cys Ile Ser Ser Gly Leu Arg Gly Gly Ile Leu  
65 70 75 80  
Ile Glu Leu Ala Met Arg Gly Arg Ile Tyr Leu Glu Pro Pro Thr Met  
85 90 95  
Arg Lys Lys Arg Leu Leu Asp Arg Lys Val Leu Leu Lys Ser Asp Ser  
100 105 110  
Pro Thr Gly Asp Val Leu Leu Asp Glu Thr Leu Lys His Ile Lys Ala  
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Thr Glu Pro Thr Glu Thr Val Gln Thr Trp Ile Glu Leu Leu Thr Gly

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 <212> DNA  
 <213> Homo sapiens

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<210> 3920  
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 <213> Homo sapiens

<400> 3920

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Leu Thr Gln Glu Arg Asp Tyr Leu Gln Ala Gln His Pro Pro Ser Pro
 35          40          45
Ile Lys Ser Ser Ser Ala Asp Ser Thr Pro Ser Pro Thr Ser Ser Leu
 50          55          60
Ser Ser Glu Asp Lys Gln His Leu Ala Val Glu Leu Ala Asp Thr Lys
 65          70          75          80
Ala Arg Leu Arg Arg Val Arg Gln Glu Leu Glu Asp Lys Thr Glu Gln
 85          90          95
Leu Val Asp Thr Arg His Glu Val Asp Gln Leu Val Leu Glu Leu Gln
100          105          110
Lys Val Lys Gln Glu Asn Ile Gln Leu Ala Ala Asp Ala Arg Ser Ala
115          120          125
Arg Ala Tyr Arg Asp Glu Leu Asp Ser Leu Arg Glu Lys Ala Asn Arg
130          135          140
Val Glu Arg Leu Glu Leu Glu Leu Thr Arg Cys Lys Glu Lys Leu His
145          150          155          160
Asp Val Asp Phe Tyr Lys Ala Arg Met Glu Glu Leu Arg Glu Asp Asn
165          170          175
Ile Ile Leu Ile Glu Thr Lys Ala Met Leu Glu Glu Gln Leu Thr Ala
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Ala Arg Ala Arg Gly Asp Lys Val His Glu Leu Glu Lys Glu Asn Leu
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Gln Leu Lys Ser Lys Leu His Asp Leu Glu Leu Asp Arg Asp Thr Asp
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245          250          255
Glu Gln Leu Ser Lys Asn Ala Asp Leu Ser Asp Ala Ser Arg Lys Ser
260          265          270
Phe Val Phe Glu Leu Asn Glu Cys Ala Ser Ser Arg Ile Leu Lys Leu
275          280          285
Glu Lys Glu Asn Gln Ser Leu Gln Ser Thr Ile Gln Gly Leu Arg Asp
290          295          300
Ala Ser Leu Val Leu Glu Glu Ser Gly Leu Lys Cys Gly Glu Leu Glu
305          310          315          320
Lys Glu Asn His Gln Leu Ser Lys Lys Ile Glu Lys Leu Gln Thr Gln
325          330          335
Leu Glu Arg Glu Lys Gln Ser Asn Gln Asp Leu Glu Thr Leu Ser Glu
340          345          350
Glu Leu Ile Arg Glu Lys Glu Gln Leu Gln Ser Asp Met Glu Thr Leu
355          360          365
Lys Ala Asp Lys Ala Arg Gln Ile Lys Asp Leu Glu Gln Glu Lys Asp

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370	375	380
His Leu Asn Arg Ala Met Trp Ser Leu Arg Glu Arg Ser Gln Val Ser		
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Ser Glu Ala Arg Met Lys Asp Val Glu Lys Glu Asn Lys Ala Leu His		400
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Gln Thr Val Thr Glu Ala Asn Gly Lys Leu		415
	420	425

<210> 3921  
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 <212> DNA  
 <213> Homo sapiens

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Asp Ser Val Gly Pro Ile Pro Ala Pro Arg Gly Asp Gly Cys Cys Arg	
50	60
Asp Val Gln Ala Val Glu Gly Ser Arg Glu Trp Ala Trp Arg Ser Ala	
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<210> 3923  
 <211> 820

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

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&lt;210&gt; 3924

&lt;211&gt; 250

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3924

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 Ser Glu Tyr Thr Gly Pro Thr Ser Ala Asp Leu Asp His Phe Pro Ser  
 35 40 45  
 Val Ser Gln Thr Lys Ala Glu Gln Asp Ser Asp Asn Lys Ser Ser Thr  
 50 55 60  
 Glu Ile Pro Leu Glu Thr Cys Cys Ser Ser Glu Leu Lys Gly Gly Gly  
 65 70 75 80  
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<210> 3926

<211> 683

<212> PRT

<213> Homo sapiens

<400> 3926

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		20					25						30		
Thr	Arg	Pro	Gln	Pro	Val	Leu	Pro	Leu	Leu	Asp	Leu	Asn	Asn	Gln	Ser
		35					40					45			
Val	Gly	Ile	Glu	Gly	Gly	Ala	Arg	Lys	Gly	Val	Ser	Gln	Lys	Asn	Asn
	50					55					60				
Asp	Leu	Thr	Ser	Cys	Cys	Phe	Ser	Asp	Ala	Lys	Thr	Met	Tyr	Glu	Val
65				70					75					80	
Phe	Gln	Arg	Gly	Leu	Ala	Val	Ser	Asp	Asn	Gly	Pro	Cys	Leu	Gly	Tyr
		85						90					95		
Arg	Lys	Pro	Asn	Gln	Pro	Tyr	Arg	Trp	Leu	Ser	Tyr	Lys	Gln	Val	Ser
		100					105					110			
Asp	Arg	Ala	Glu	Tyr	Leu	Gly	Ser	Cys	Leu	Leu	His	Lys	Gly	Tyr	Lys
	115					120						125			
Ser	Ser	Pro	Asp	Gln	Phe	Val	Gly	Ile	Phe	Ala	Gln	Asn	Arg	Pro	Glu
	130					135					140				
Trp	Ile	Ile	Ser	Glu	Leu	Ala	Cys	Tyr	Thr	Tyr	Ser	Met	Val	Ala	Val
145				150					155					160	
Pro	Leu	Tyr	Asp	Thr	Leu	Gly	Pro	Glu	Ala	Ile	Val	His	Ile	Val	Asn

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165      170      175
Lys Ala Asp Ile Ala Met Val Ile Cys Asp Thr Pro Gln Lys Ala Leu
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Val Leu Ile Gly Asn Val Glu Lys Gly Phe Thr Pro Ser Leu Lys Val
195      200      205
Ile Ile Leu Met Asp Pro Phe Asp Asp Asp Leu Lys Gln Arg Gly Glu
210      215      220
Lys Ser Gly Ile Glu Ile Leu Ser Leu Tyr Asp Ala Glu Asn Leu Asp
225      230      235      240
Lys Glu His Phe Arg Lys Pro Val Pro Pro Ser Pro Glu Asp Leu Ser
245      250      255
Val Ile Cys Phe Thr Ser Gly Thr Thr Gly Asp Pro Lys Gly Ala Met
260      265      270
Ile Thr His Gln Asn Ile Val Ser Asn Ala Ala Ala Phe Leu Lys Cys
275      280      285
Val Glu His Ala Tyr Glu Pro Thr Pro Asp Asp Val Ala Ile Ser Tyr
290      295      300
Leu Pro Leu Ala His Met Phe Glu Arg Ile Val Gln Ala Val Val Tyr
305      310      315      320
Ser Cys Gly Ala Arg Val Gly Phe Phe Gln Gly Asp Ile Arg Leu Leu
325      330      335
Ala Asp Asp Met Lys Thr Leu Lys Pro Thr Leu Phe Pro Ala Val Pro
340      345      350
Arg Leu Leu Asn Arg Ile Tyr Asp Lys Val Gln Asn Glu Ala Lys Thr
355      360      365
Pro Leu Lys Lys Phe Leu Leu Lys Leu Ala Val Ser Ser Lys Phe Lys
370      375      380
Glu Leu Gln Lys Gly Ile Ile Arg His Asp Ser Phe Trp Asp Lys Leu
385      390      395      400
Ile Phe Ala Lys Ile Gln Asp Ser Leu Gly Gly Arg Val Arg Val Ile
405      410      415
Val Thr Gly Ala Ala Pro Ile Ser Thr Pro Val Leu Thr Phe Phe Arg
420      425      430
Ala Ala Met Gly Cys Trp Val Phe Glu Ala Tyr Gly Gln Thr Glu Cys
435      440      445
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450      455      460
Val Gly Val Pro Leu Ala Cys Asn Tyr Val Lys Leu Glu Asp Val Ala
465      470      475      480
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485      490      495
Gly Thr Asn Val Phe Lys Gly Tyr Leu Lys Asp Pro Glu Lys Thr Gln
500      505      510
Glu Ala Leu Asp Ser Asp Gly Trp Leu His Thr Gly Asp Ile Gly Arg
515      520      525
Trp Leu Pro Asn Gly Thr Leu Lys Ile Ile Asp Arg Lys Lys Asn Ile
530      535      540
Phe Lys Leu Ala Gln Gly Glu Tyr Ile Ala Pro Glu Lys Ile Glu Asn
545      550      555      560
Ile Tyr Asn Arg Ser Gln Pro Val Leu Gln Ile Phe Val His Gly Glu
565      570      575
Ser Leu Arg Ser Ser Leu Val Gly Val Val Val Pro Asp Thr Asp Val
580      585      590
Leu Pro Ser Phe Ala Ala Lys Leu Gly Val Lys Gly Ser Phe Glu Glu

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595	600	605
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Lys Ile Gly Lys Glu Ser Gly Leu Lys Thr Phe Glu Gln Val Lys Ala		
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Ile Phe Leu His Pro Glu Pro Phe Ser Ile Glu Asn Gly Leu Leu Thr		
645	650	655
Pro Thr Leu Lys Ala Lys Arg Gly Glu Leu Ser Lys Tyr Phe Arg Thr		
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Gln Ile Asp Ser Leu Tyr Glu His Ile Gln Asp		
675	680	

&lt;210&gt; 3927

&lt;211&gt; 3197

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3927

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<210> 3928

<211> 180

<212> PRT

<213> Homo sapiens

<400> 3928

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			20					25					30		
Asp	Ser	Ser	Ser	Arg	Arg	Arg	Arg	Ser	Cys	Cys	Thr	Gly	Ser	Leu	Gly
		35					40					45			
Pro	Met	Pro	Arg	Leu	Pro	Ser	Leu	Trp	Pro	Leu	Ser	Leu	Pro	Leu	Arg
	50					55				60					
Ser	Leu	Ser	Ser	Pro	His	Arg	Val	Gln	Gly	Leu	Gly	Pro	Pro	Arg	Arg
65					70				75					80	
Leu	Lys	Ser	Gln	Leu	Leu	Pro	Arg	Phe	Phe	Trp	Arg	Arg	Gln	Gln	Glu
			85						90					95	
Pro	Leu	Ser	Ser	Phe	Pro	Gly	Arg	Asn	Glu	Gly	Gly	Ser	Glu	Met	Glu
			100					105					110		
Ile	Leu	Gly	Val	Cys	Pro	Val	Ser	Pro	Gly	Ala	Leu	Ser	Tyr	Met	Glu
		115					120						125		
Ser	Pro	Thr	Gly	Phe	Trp	Arg	Pro	Arg	Glu	Ala	Ser	Ser	Leu	Glu	Leu
		130				135					140				
Ala	Lys	Gly	Ile	Ser	Lys	Arg	Arg	His	Phe	Leu	Pro	Ala	Pro	Ala	Leu
145					150					155				160	
Cys	Pro	Asn	Pro	Arg	Ser	Ser	Glu	Ala	Phe	Pro	Gly	Ala	Val	Cys	Val
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Thr	Leu	Ala	Ile												
			180												

<210> 3929

<211> 470

<212> DNA

<213> Homo sapiens

&lt;400&gt; 3929

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 240  
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 360  
 gaattgggat cgtgtcgtcg cggttatgtg ttctgtatgt tacatcgcct ccccgagcag  
 420  
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 470

&lt;210&gt; 3930

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3930

Thr	Lys	Asn	Ser	Val	Thr	Trp	Trp	Pro	Cys	Leu	Val	Phe	Arg	Ser	Thr
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Pro	Pro	Arg	Cys	Ala	Gly	Arg	Ser	Ala	Pro	Leu	Ser	Gly	Pro	Asp	Ser
			20					25					30		
Gln	Ser	Glu	Asn	Glu	Ala	Ser	Pro	Val	Lys	Arg	Pro	Arg	Leu	Leu	Glu
			35					40					45		
Asn	Thr	Glu	Arg	Ser	Glu	Glu	Thr	Ser	Arg	Ser	Lys	Gln	Lys	Ser	Arg
			50				55				60				
Arg	Arg	Cys	Phe	Gln	Cys	Gln	Thr	Lys	Leu	Glu	Leu	Val	Gln	Gln	Glu
65					70					75				80	
Leu	Gly	Ser	Cys	Arg	Cys	Gly	Tyr	Val	Phe	Cys	Met	Leu	His	Arg	Leu
			85						90				95		
Pro	Glu	Gln	His	Asp	Cys	Thr	Phe	Asp	His	Met	Gly	Val	Ala	Gly	Arg
			100					105					110		
Ser	His	His													
			115												

&lt;210&gt; 3931

&lt;211&gt; 3568

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3931

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 180

gcattctata atttcaaatg aaatctatac tttaaaaaca attaatgtca aattttgtca  
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480  
aactgatatt cttatctact cataaaatta tttttgaatt gcaaacgaac cgctatgcgt  
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 3568

<210> 3932  
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 <213> Homo sapiens

<400> 3932  
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 Cys His Tyr Trp Lys Ser Ser Ser Ile Glu Glu Arg Gly Tyr Trp Gly  
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 50 55 60  
 Arg Ser Ser Ile Glu Asp Asp Phe Asn Tyr Gly Ser Ser Val Ala Ser  
 65 70 75 80  
 Ala Thr Val His Ile Arg Met Ala Phe Leu Arg Lys Val Tyr Ser Ile  
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 Tyr Ile Ile Leu Gln Ala Phe Ile Leu Thr Thr Thr Val Phe Phe Gly  
 180 185 190  
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 Ala Gly Leu Phe Ala Leu Leu Trp Ile Leu Cys Leu Ser Gly Phe Leu  
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 Lys Phe Phe Phe Tyr Ser Glu Ile Met Glu Leu Val Leu Ala Ala Ala  
 225 230 235 240  
 Gly Ala Leu Leu Phe Cys Gly Phe Ile Ile Tyr Asp Thr His Ser Leu  
 245 250 255  
 Met His Lys Leu Ser Pro Glu Glu Tyr Val Leu Ala Ala Ile Ser Leu  
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<210> 3933  
 <211> 4082

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3933

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<210> 3934

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3934

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Ala	Ala	Gly	Thr	Ser	Ser	Pro	Ile	Arg	Pro	Val	Ser	Ser	Pro	Val	Leu
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His	Gly	Arg	Ile	Lys	Gly	Met	Lys	Gly	Phe	Gln	Ser	Phe	Met	Val	
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Ser	Asp	Ser	Asn	Met	Ser	Phe	Val	Glu	Phe	Val	Glu	Leu	Phe	Lys	Ser
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Phe	Ser	Val	Arg	Ser	Arg	Lys	Asp	Leu	Lys	Asp	Leu	Phe	Asp	Xaa	Leu

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Pro Thr					
130					

&lt;210&gt; 3935

&lt;211&gt; 1103

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3935

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&lt;210&gt; 3936

&lt;211&gt; 265

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3936

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Val Gly Gly Thr Glu His Ala Tyr Arg Pro Gly Arg Arg Val Cys Ala
      20              25              30
Val Arg Ala His Gly Asp Pro Val Ser Glu Ser Phe Val Gln Arg Val
      35              40              45
Tyr Gln Pro Phe Leu Thr Thr Cys Asp Gly His Arg Ala Cys Ser Thr
      50              55              60
Tyr Arg Thr Ile Tyr Arg Thr Ala Tyr Arg Arg Ser Pro Gly Leu Ala
      65              70              75              80
Pro Ala Arg Pro Arg Tyr Ala Cys Cys Pro Gly Trp Lys Arg Thr Ser
      85              90              95
Gly Leu Pro Gly Ala Cys Gly Ala Ala Ile Cys Gln Pro Pro Cys Arg
      100             105             110
Asn Gly Gly Ser Cys Val Gln Pro Gly Arg Cys Arg Cys Pro Ala Gly
      115             120             125
Trp Arg Gly Asp Thr Cys Gln Ser Asp Val Asp Glu Cys Ser Ala Arg
      130             135             140
Arg Gly Gly Cys Pro Gln Arg Cys Val Asn Thr Ala Gly Ser Tyr Trp
      145             150             155             160
Cys Gln Cys Trp Glu Gly His Ser Leu Ser Ala Asp Gly Thr Leu Cys
      165             170             175
Val Pro Lys Gly Gly Pro Pro Arg Val Ala Pro Asn Pro Thr Gly Lys
      180             185             190
Gln Pro Trp Leu Cys Leu Ala Trp Gly Gly Gly Gln Ala Val Asp Ile
      195             200             205
Ala Val Trp Leu Leu Gly Met Val Gly Gly Thr Gly Ile Trp Ala Glu
      210             215             220
Gly Gly Gly Asp Ser Leu Ser Arg Glu Gly Gly Trp Gly Gly Arg Ile
      225             230             235             240
Gly Gly Phe Pro Arg Thr Gly Gly Arg Leu Pro Gly Ala Ser Tyr Gln
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Pro Arg Arg Gln Lys Cys Pro Val Pro
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&lt;210&gt; 3937

&lt;211&gt; 744

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3937

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<210> 3938

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3938

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Arg	Arg	Gly	Trp	Arg	Gly	Leu	Arg	Ala	Pro	Arg	Tyr	Arg	Asp	Pro	Gly
		35				40					45				
Arg	Ala	Ala	Glu	Ala	Gly	Asn	Ala	Lys	Gly	Asp	Ala	Thr	Ala	Gly	Pro
	50					55				60					
Lys	Glu	Gln	Gly	Gly	Gly	Gly	Gln	Asp	Pro	Ala	Ala	Ile	Ala	Gly	His
65					70					75				80	
Ser	Ala	Gly	Gly	Ser	Asp	His	Ala	Gly	Glu	Arg	Gly	Leu	Xaa	Gly	Arg
			85						90					95	
Thr	Gly	Trp	Leu	Ala	Ala	Lys	Ala	Ala	Pro	Ala	Gly	Gly	His	Arg	Glu
		100					105						110		
Thr	Gly	Leu	Ala	Ser	Val	Gly	Ala	Gly	Pro	Trp	Leu	Gly	Arg	Arg	Asn
		115					120					125			
Pro	Arg	Gln	Pro	Phe	Ser	Phe	Val	Gly	Pro	Ala	Glu	Ser	Pro	Asp	Arg
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<210> 3939

<211> 490

<212> DNA

<213> Homo sapiens

<400> 3939

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&lt;210&gt; 3940

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3940

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		20				25						30			
Arg	Asp	Arg	Gln	Trp	Glu	Ala	Glu	Leu	Lys	Thr	Val	Lys	Glu	Arg	Ala
	35				40					45					
Thr	Asp	Ser	Glu	Gly	Gly	Arg	Asp	Arg	Leu	Glu	Pro	Phe	Leu		
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&lt;210&gt; 3941

&lt;211&gt; 2077

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3941

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2077

&lt;210&gt; 3942

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3942

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 Gly Ala Arg Ser Gln Ser Thr Pro Ser Ser Asp Thr Leu Pro Pro Ala  
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 Leu Leu Gly Ser Pro Ala Ser Val Ser Gly Thr Gly Gly Thr Asp Met  
 65 70 75 80  
 Ser Ser Ala Asn Ala His Ser Ala Leu  
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&lt;210&gt; 3943

&lt;211&gt; 1524

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3943

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 420  
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 780  
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 900

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<210> 3944

<211> 435

<212> PRT

<213> Homo sapiens

<400> 3944

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Arg	Leu	Gly	Pro	Thr	Pro	Gly	Pro	Pro	Pro	Ser	Pro	Gly	Arg	Pro	Ala	20	25	30	
Val	Gly	Thr	Met	Ser	Gln	Val	Leu	Gly	Lys	Pro	Gln	Pro	Gln	Asp	Glu	35	40	45	
Asp	Asp	Ala	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Glu	Leu	Val	Gly	Leu	Ala	50	55	60	
Asp	Tyr	Gly	Asp	Gly	Pro	Asp	Ser	Ser	Asp	Ala	Asp	Pro	Asp	Ser	Gly	65	70	75	80
Thr	Glu	Glu	Gly	Val	Leu	Asp	Phe	Ser	Asp	Pro	Phe	Ser	Thr	Glu	Val	85	90	95	
Lys	Pro	Arg	Ile	Leu	Leu	Met	Gly	Leu	Arg	Arg	Ser	Gly	Lys	Ser	Ser	100	105	110	
Ile	Gln	Lys	Val	Val	Phe	His	Lys	Met	Ser	Pro	Asn	Glu	Thr	Leu	Phe	115	120	125	
Leu	Glu	Ser	Thr	Asn	Lys	Ile	Cys	Arg	Glu	Asp	Val	Ser	Asn	Ser	Ser	130	135	140	
Phe	Val	Asn	Phe	Gln	Ile	Trp	Asp	Phe	Pro	Gly	Gln	Ile	Asp	Phe	Phe	145	150	155	160
Asp	Pro	Thr	Phe	Asp	Tyr	Glu	Met	Ile	Phe	Arg	Gly	Thr	Gly	Ala	Leu	165	170	175	
Ile	Phe	Val	Ile	Asp	Ala	Gln	Asp	Asp	Tyr	Met	Glu	Ala	Leu	Thr	Arg	180	185	190	
Leu	His	Ile	Thr	Val	Ser	Lys	Ala	Tyr	Lys	Val	Asn	Pro	Asp	Met	Asn				

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      195              200              205
Phe Glu Val Phe Ile His Lys Val Asp Gly Leu Ser Asp Asp His Lys
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Ile Glu Thr Gln Arg Asp Ile His Gln Arg Ala Asn Asp Asp Leu Ala
  225              230              235              240
Asp Ala Gly Leu Glu Lys Ile His Leu Ser Phe Tyr Leu Thr Ser Ile
      245              250              255
Tyr Asp His Ser Ile Phe Glu Ala Phe Ser Lys Val Val Gln Lys Leu
      260              265              270
Ile Pro Gln Leu Pro Thr Leu Glu Asn Leu Leu Asn Ile Phe Ile Ser
      275              280              285
Asn Ser Gly Ile Glu Lys Ala Phe Leu Phe Asp Val Val Ser Lys Ile
      290              295              300
Tyr Ile Ala Thr Asp Ser Thr Pro Val Asp Met Gln Thr Tyr Glu Leu
  305              310              315              320
Cys Cys Asp Met Ile Asp Val Val Ile Asp Ile Ser Cys Ile Tyr Gly
      325              330              335
Leu Lys Glu Asp Gly Ala Gly Thr Pro Tyr Asp Lys Glu Ser Thr Ala
      340              345              350
Ile Ile Lys Leu Asn Asn Thr Thr Val Leu Tyr Leu Lys Glu Val Thr
      355              360              365
Lys Phe Leu Ala Leu Val Cys Phe Val Arg Glu Glu Ser Phe Glu Arg
      370              375              380
Lys Gly Leu Ile Asp Tyr Asn Phe His Cys Phe Arg Lys Ala Ile His
  385              390              395              400
Glu Val Phe Glu Val Arg Met Lys Val Val Lys Ser Arg Lys Val Gln
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Asn Arg Leu Gln Lys Lys Lys Arg Ala Thr Pro Asn Gly Thr Pro Arg
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Val Leu Leu
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<210> 3945  
 <211> 696  
 <212> DNA  
 <213> Homo sapiens

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 cgggcgcgcc cagcagtagc accgcccgcg cccgcccctg gacacttgta agtttcgatt  
 180  
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 360  
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 480

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 540  
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 600  
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<210> 3946

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3946

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Gly	Ser	Ser	Gly	His	His	Arg	Ser	Gly	Asp	Pro	Gly	Leu	Ala	Ala	
			20				25				30				
Gly	Leu	Gln	His	His	Lys	Ala	Val	Gly	Pro	Gly	His	Leu	Gln	His	Leu
		35				40					45				
Thr	Glu	Leu	Arg	Leu	Arg	Gln	Arg	Asp	Leu	Leu	Glu	Gln	Arg	Val	Gln
	50					55					60				
Gly	His	Ala	Ala	Pro	Val	Gly	Ala	Gln	Asp	Phe	Gly	Asp	Glu	Ala	Ala
65					70				75				80		
His	Leu	Arg	Val	Arg	His	Gly	Ala	Leu	Ala	Val	Leu	Ala	Leu	Pro	Arg
			85					90					95		
Arg	Gly	Thr	Arg	Phe	Arg	Gly	Asn	Arg	Lys	Ser	Lys	Leu	Thr	Ser	Val
		100					105						110		
Gln	Gly	Arg	Ala	Arg	Ala	Val	Leu	Leu	Leu	Gly	Ala	Pro	Gly	Val	Ser
		115				120						125			
Glu	Gly	Ala	Leu	Ser	Val	Ala	Val	Ser	Pro	Ala	Gln	Arg	Ser	Thr	Leu
	130					135					140				
Gly	Ser	Gln	Val	Lys	Arg	Leu	Asp	Leu	Thr	Asp	Arg	Val	Leu	Val	Ala
145					150				155					160	
Gly	Leu	Gln	Pro	Ala											
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<210> 3947

<211> 400

<212> DNA

<213> Homo sapiens

<400> 3947

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 180  
 gccagcgagc aggtaataca agacctaaag ggctcggact acagctggtc ctaccagacc  
 240  
 ccaccctcat caccagcag ctccagctcc cggaagtcca gcatgtgcag tgccccccagc  
 300

agcagtagca gtgccaaggg tggcggaagc cccatggcct gggggtgcc aaacatactc  
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<210> 3948

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3948

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Phe	Cys	Thr	Phe	Ile	Thr	Phe	Leu	Gln	Pro	Val	Val	Asn	Gly	Glu	Leu
			20				25						30		
Thr	Met	Leu	Gly	Glu	Ile	Thr	His	Leu	Gln	Gly	Ile	Ile	Asp	Asp	Leu
		35					40					45			
Val	Val	Leu	Thr	Ala	Glu	Pro	His	Lys	Leu	Pro	Pro	Ala	Ser	Glu	Gln
	50					55				60					
Val	Ile	Lys	Asp	Leu	Lys	Gly	Ser	Asp	Tyr	Ser	Trp	Ser	Tyr	Gln	Thr
65				70					75					80	
Pro	Pro	Ser	Ser	Pro	Ser	Ser	Ser	Ser	Ser	Arg	Lys	Ser	Ser	Met	Cys
			85					90					95		
Ser	Ala	Pro	Ser	Ser	Ser	Ser	Ser	Ala	Lys	Gly	Gly	Gly	Ser	Pro	Met
		100					105						110		
Ala	Trp	Gly	Cys	Pro	Asn	Ile	Leu	Thr	Gln	Phe	His	Leu	Ser	Leu	Pro
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Gln	Pro	Gly	Ala	Ala											
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<210> 3949

<211> 1462

<212> DNA

<213> Homo sapiens

<400> 3949

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 120  
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 180  
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 240  
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 300  
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 360  
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 420  
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 780  
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&lt;210&gt; 3950

&lt;211&gt; 351

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3950

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Ser	Leu	Leu	Ser	Asp	Gln	Leu	Gly	Cys	Glu	Val	Leu	Asn	Leu	Leu	Thr
		20					25					30			
Ala	Gln	Gln	Tyr	Glu	Ile	Phe	Ser	Arg	Ser	Leu	Arg	Lys	Asn	Arg	Glu
		35					40					45			
Leu	Phe	Val	His	Gly	Leu	Pro	Gly	Ser	Gly	Lys	Asn	Ile	Met	Ala	Met
	50				55					60					
Lys	Ile	Met	Glu	Lys	Ile	Arg	Asn	Val	Phe	His	Cys	Glu	Ala	His	Arg
65				70					75					80	
Ile	Leu	Tyr	Val	Cys	Glu	Asn	Gln	Pro	Leu	Arg	Asn	Phe	Ile	Ser	Asp
		85					90					95			
Arg	Asn	Ile	Cys	Arg	Ala	Glu	Thr	Arg	Glu	Thr	Phe	Leu	Arg	Glu	Lys
		100					105					110			
Phe	Glu	His	Ile	Gln	His	Ile	Val	Ile	Asp	Glu	Ala	Gln	Asn	Phe	Arg

115	120	125
Thr Glu Asp Gly Asp Trp Tyr Gly Lys Ala Lys Ser Ile Thr Gln Arg		
130	135	140
Glu Lys Asp Cys Pro Gly Val Leu Trp Ile Phe Leu Asp Tyr Phe Gln		
145	150	155
Thr Ser His Leu Gly His Ser Gly Leu Pro Pro Leu Ser Asp Gln Tyr		
165	170	175
Pro Arg Glu Glu Leu Thr Arg Ile Val Arg Asn Ala Asp Glu Ile Ala		
180	185	190
Glu Tyr Leu Gln Lys Glu Met Gln Leu Ile Ile Glu Asn Pro Pro Ile		
195	200	205
Asn Ile Pro Thr Gly Cys Leu Glu Val Phe Pro Glu Ala Glu Trp Ser		
210	215	220
Gln Gly Val Gln Gly Thr Leu Arg Ile Lys Lys Tyr Leu Thr Val Glu		
225	230	235
Gln Ile Met Thr Cys Val Ala Asp Thr Cys Arg Arg Phe Phe Asp Arg		
245	250	255
Gly Tyr Ser Pro Lys Asp Val Ala Val Leu Val Ser Thr Ala Lys Glu		
260	265	270
Val Glu His Tyr Lys Tyr Glu Leu Leu Lys Ala Met Arg Lys Lys Arg		
275	280	285
Val Val Gln Leu Ser Asp Ala Cys Asp Met Leu Gly Asp His Ile Val		
290	295	300
Leu Asp Ser Val Arg Arg Phe Ser Gly Leu Glu Arg Ser Ile Val Phe		
305	310	315
Gly Ile His Pro Arg Thr Ala Asp Pro Ala Ile Leu Pro Asn Ile Leu		
325	330	335
Ile Cys Leu Ala Ser Arg Ala Lys Gln His Leu Tyr Ile Phe Leu		
340	345	350

&lt;210&gt; 3951

&lt;211&gt; 1012

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3951

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 180  
 ccatctactc tgcctccagt ccaacaagcc aacagccttc atacaagcaa aatgaagact  
 240  
 ttgactaggg tccaaccagt gtttcacttc aagcccacta cgggtggtgac aagctgccag  
 300  
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 360  
 aaaatctggt taatgaagac ctgcgtcagg agcgggaggg ccgctctgcg agagctccga  
 420  
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 540

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 1012

&lt;210&gt; 3952

&lt;211&gt; 188

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3952

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Thr	Val	Val	Thr	Ser	Cys	Gln	Pro	Lys	Asn	Pro	Arg	Glu	Leu	His	Arg
			20					25					30		
Arg	Arg	Lys	Leu	Asp	Pro	Gly	Lys	Met	His	Ala	Lys	Ile	Trp	Leu	Met
		35				40						45			
Lys	Thr	Ser	Leu	Arg	Ser	Gly	Arg	Ala	Ala	Leu	Arg	Glu	Leu	Arg	Ser
	50					55					60				
Arg	Glu	Asn	Phe	Leu	Ser	Lys	Leu	Asn	Arg	Glu	Leu	Ile	Glu	Thr	Ile
				70						75					80
Gln	Glu	Met	Glu	Asn	Ser	Thr	Thr	Leu	His	Val	Arg	Ala	Leu	Leu	Gln
				85					90					95	
Gln	Gln	Asp	Thr	Leu	Ala	Thr	Ile	Ile	Asp	Ile	Leu	Glu	Tyr	Ser	Asn
			100					105					110		
Lys	Lys	Arg	Leu	Gln	Gln	Leu	Lys	Ser	Glu	Leu	Gln	Glu	Trp	Glu	Glu
		115					120					125			
Lys	Lys	Lys	Cys	Lys	Met	Ser	Tyr	Leu	Glu	Gln	Gln	Ala	Glu	Gln	Leu
		130				135						140			
Asn	Ala	Lys	Ile	Glu	Lys	Thr	Gln	Glu	Glu	Val	Asn	Phe	Leu	Ser	Thr
				150						155					160
Tyr	Met	Asp	His	Glu	Tyr	Ser	Ile	Lys	Ser	Val	Gln	Ile	Ser	Thr	Leu
			165					170						175	
Met	Arg	His	Cys	Ser	Arg	Leu	Arg	Thr	Ala	Ser	Arg				
			180					185							

&lt;210&gt; 3953

&lt;211&gt; 2900

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3953

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420  
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&lt;210&gt; 3954

&lt;211&gt; 627

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3954

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 <212> DNA  
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&lt;400&gt; 3956

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Ser Thr Met Thr Tyr Leu Asn Lys Gly Gln Phe Tyr Pro Ile Thr Leu
      35           40           45
Lys Glu Val Ser Ser Ser Glu Asn Pro Ser Ser His Ser Lys Val Arg
      50           55           60
Ser Val Ile Met Val Val Phe Ala Glu Asp Lys Ser Arg Glu Asp Gln
      65           70           75           80
Leu Arg His Trp Lys Tyr Trp His Ser Arg Gln His Thr Ala Lys Gln
      85           90           95
Arg Cys Ile Asp Ile Ala Asp Tyr Lys Glu Ser Phe Asn Thr Ile Ser
      100          105          110
Asn Ile Glu Glu Ile Ala Tyr Asn Ala Ile Ser Phe Thr Trp Asp Ile
      115          120          125
Asn Asp Glu Ala Lys Val Phe Ile Ser Val Asn Cys Leu Ser Thr Asp
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Phe Ser Ser Gln Lys Gly Val Lys Gly Leu Pro Leu Asn Ile Gln Val
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&lt;210&gt; 3957

&lt;211&gt; 3891

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3957

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&lt;211&gt; 440

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3958

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<210> 3962

<211> 306

<212> PRT

<213> Homo sapiens

<400> 3962

Thr	Lys	Asn	Ile	Glu	Gly	Gln	Met	Thr	Pro	Tyr	Tyr	Pro	Val	Gly	Met
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Gly	Asn	Gly	Thr	Pro	Cys	Ser	Leu	Lys	Gln	Asn	Arg	Pro	Arg	Ser	Ser
			20					25					30		
Thr	Val	Met	Tyr	Ile	Cys	His	Pro	Glu	Ser	Lys	His	Glu	Ile	Leu	Ser

```

      35      40      45
Val Ala Glu Val Thr Thr Cys Glu Tyr Glu Val Val Ile Leu Thr Pro
  50      55      60
Leu Leu Cys Ser His Pro Lys Tyr Arg Phe Arg Ala Ser Pro Val Asn
  65      70      75      80
Asp Ile Phe Cys Gln Ser Leu Pro Gly Ser Pro Phe Lys Pro Leu Thr
      85      90      95
Leu Arg Gln Leu Glu Gln Gln Glu Ile Leu Arg Val Pro Phe Arg
      100      105      110
Arg Asn Lys Glu Glu Asp Leu Gln Ser Thr Lys Glu Glu Arg Phe Pro
      115      120      125
Ala Ile His Lys Ser Ile Ala Ile Gly Ser Gln Pro Val Leu Thr Val
      130      135      140
Gly Thr Thr His Ile Ser Lys Leu Thr Asp Asp Gln Leu Ile Lys Glu
  145      150      155      160
Phe Leu Ser Gly Ser Tyr Cys Phe Arg Gly Gly Val Gly Trp Trp Lys
      165      170      175
Tyr Glu Phe Cys Tyr Gly Lys His Val His Gln Tyr His Glu Asp Lys
      180      185      190
Asp Ser Gly Lys Thr Ser Val Val Gly Thr Trp Asn Gln Glu Glu
      195      200      205
His Ile Glu Trp Ala Lys Lys Asn Thr Ala Arg Ala Tyr His Leu Gln
      210      215      220
Asp Asp Gly Thr Gln Thr Val Arg Met Val Ser His Phe Tyr Gly Asn
  225      230      235      240
Gly Asp Ile Cys Asp Ile Thr Asp Lys Pro Arg Gln Val Thr Val Lys
      245      250      255
Leu Lys Cys Lys Glu Ser Asp Ser Pro His Ala Val Thr Val Tyr Met
      260      265      270
Leu Glu Pro His Ser Cys Gln Tyr Ile Leu Gly Val Glu Ser Pro Val
      275      280      285
Ile Cys Lys Ile Leu Asp Thr Ala Asp Glu Asn Gly Leu Leu Ser Leu
      290      295      300
Pro Asn
305

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&lt;210&gt; 3963

&lt;211&gt; 1513

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3963

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240
atagataaac atagcctaaa tattggtgat tacaatcgaa cggtcgggaa aggccttggt
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360

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&lt;210&gt; 3964

&lt;211&gt; 436

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3964

Met	Ala	Met	Ala	Ser	Phe	Leu	Leu	Phe	Tyr	Phe	Thr	Lys	Gly	Met	Met
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Lys	Gly	Gly	Asn	Lys	Gln	Glu	Glu	Ala	Trp	Ile	Asn	Pro	Phe	Val	Lys
			20				25					30			
Gln	Phe	Ser	Asn	Ile	Ser	Phe	Ser	Arg	Asp	Ser	Pro	Glu	Glu	Asn	Val
		35				40					45				
Gln	Ser	Asn	Lys	Met	Asp	Leu	Ser	Gly	Gly	Met	Leu	Gln	Asp	Lys	Arg

50                      55                      60  
 Met Glu Ile Asp Lys His Ser Leu Asn Ile Gly Asp Tyr Asn Arg Thr  
 65                      70                      75                      80  
 Val Gly Lys Gly Pro Gly Ser Arg Pro Gln Ile Ser Lys Glu Ser Ser  
                     85                      90                      95  
 Met Glu Arg Asn Pro Tyr Phe Asp Lys Asn Gly Asn Pro Ser Met Phe  
                     100                      105                      110  
 Gly Val Gly Asn Thr Ala Ala Gln Pro Arg Gly Met Gln Gln Pro Pro  
                     115                      120                      125  
 Ala Gln Pro Leu Ser Ser Ser Gln Pro Asn Leu Arg Ala Gln Val Pro  
                     130                      135                      140  
 Pro Pro Leu Leu Ser Pro Gln Val Pro Val Ser Leu Leu Lys Tyr Ala  
 145                      150                      155                      160  
 Pro Asn Asn Gly Gly Leu Asn Pro Leu Phe Gly Pro Gln Gln Val Ala  
                     165                      170                      175  
 Met Leu Asn Gln Leu Ser Gln Leu Asn Gln Leu Ser Gln Ile Ser Gln  
                     180                      185                      190  
 Leu Gln Arg Leu Leu Ala Gln Gln Gln Arg Ala Gln Ser Gln Arg Ser  
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 Val Pro Ser Gly Asn Arg Pro Gln Gln Asp Gln Gln Gly Arg Pro Leu  
                     210                      215                      220  
 Ser Val Gln Gln Gln Met Met Gln Gln Ser Arg Gln Leu Asp Pro Asn  
 225                      230                      235                      240  
 Leu Leu Val Lys Gln Gln Thr Pro Pro Ser Gln Gln Gln Pro Leu His  
                     245                      250                      255  
 Gln Pro Ala Met Lys Ser Phe Leu Asp Asn Val Met Pro His Thr Thr  
                     260                      265                      270  
 Pro Glu Leu Gln Lys Gly Pro Ser Pro Ile Asn Ala Phe Ser Asn Phe  
                     275                      280                      285  
 Pro Ile Gly Leu Asn Ser Asn Leu Asn Val Asn Met Asp Met Asn Ser  
                     290                      295                      300  
 Ile Lys Glu Pro Gln Ser Arg Leu Arg Lys Trp Thr Thr Val Asp Ser  
 305                      310                      315                      320  
 Ile Ser Val Asn Thr Ser Leu Asp Gln Asn Ser Ser Lys His Gly Ala  
                     325                      330                      335  
 Ile Ser Ser Gly Phe Arg Leu Glu Glu Ser Pro Phe Val Pro Tyr Asp  
                     340                      345                      350  
 Phe Met Asn Ser Ser Thr Ser Pro Ala Ser Pro Pro Gly Ser Ile Gly  
                     355                      360                      365  
 Asp Gly Trp Pro Arg Ala Lys Ser Pro Asn Gly Ser Ser Ser Val Asn  
                     370                      375                      380  
 Trp Pro Pro Glu Phe Arg Pro Gly Glu Pro Trp Lys Gly Tyr Pro Asn  
 385                      390                      395                      400  
 Ile Asp Pro Glu Thr Asp Pro Tyr Val Thr Pro Gly Ser Val Ile Asn  
                     405                      410                      415  
 Asn Leu Pro Ile Asn Thr Val Arg Glu Val Asp His Leu Arg Asp Arg  
                     420                      425                      430  
 Asn Ser Gly Thr  
                     435

&lt;210&gt; 3965

&lt;211&gt; 2850

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3965

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 2820  
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 2850

&lt;210&gt; 3966

&lt;211&gt; 782

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3966

Met Gly Pro Pro Leu Ala Pro Arg Pro Ala His Val Pro Gly Glu Ala  
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 Gly Pro Arg Arg Thr Arg Glu Ser Arg Pro Gly Ala Val Ser Phe Ala

```

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Asp Val Ala Val Tyr Phe Ser Pro Glu Glu Trp Glu Cys Leu Arg Pro
      35      40      45
Ala Gln Arg Ala Leu Tyr Arg Asp Val Met Arg Glu Thr Phe Gly His
      50      55      60
Leu Gly Ala Leu Gly Glu Ala Gly Pro Ser Gly Arg Asp Pro Gln Ser
65      70      75      80
Val Gly Phe Ser Val Pro Lys Pro Ala Phe Ile Ser Trp Val Glu Gly
      85      90      95
Glu Val Glu Ala Trp Ser Pro Glu Ala Gln Asp Pro Asp Gly Glu Ser
      100      105      110
Ser Ala Ala Phe Ser Arg Gly Gln Gly Gln Glu Ala Gly Ser Arg Asp
      115      120      125
Gly Asn Glu Glu Lys Glu Arg Leu Lys Lys Cys Pro Lys Gln Lys Glu
      130      135      140
Val Ala His Glu Val Ala Val Lys Glu Trp Trp Pro Ser Val Ala Cys
145      150      155      160
Pro Glu Phe Cys Asn Pro Arg Gln Ser Pro Met Asn Pro Trp Leu Lys
      165      170      175
Asp Thr Leu Thr Arg Arg Leu Pro His Ser Cys Pro Asp Cys Gly Arg
      180      185      190
Asn Phe Ser Tyr Pro Ser Leu Leu Ala Ser His Gln Arg Val His Ser
      195      200      205
Gly Glu Arg Pro Phe Ser Cys Gly Gln Cys Gln Ala Arg Phe Ser Gln
      210      215      220
Arg Arg Tyr Leu Leu Gln His Gln Phe Ile His Thr Gly Glu Lys Pro
225      230      235      240
Tyr Pro Cys Pro Asp Cys Gly Arg Arg Phe Arg Gln Arg Gly Ser Leu
      245      250      255
Ala Ile His Arg Arg Ala His Thr Gly Glu Lys Pro Tyr Ala Cys Ser
      260      265      270
Asp Cys Lys Ser Arg Phe Thr Tyr Pro Tyr Leu Leu Ala Ile His Gln
      275      280      285
Arg Lys His Thr Gly Glu Lys Pro Tyr Ser Cys Pro Asp Cys Ser Leu
      290      295      300
Arg Phe Ala Tyr Thr Ser Leu Leu Ala Ile His Arg Arg Ile His Thr
305      310      315      320
Gly Glu Lys Pro Tyr Pro Cys Pro Asp Cys Gly Arg Arg Phe Thr Tyr
      325      330      335
Ser Ser Leu Leu Ser His Arg Arg Ile His Ser Asp Ser Arg Pro
      340      345      350
Phe Pro Cys Val Glu Cys Gly Lys Gly Phe Lys Arg Lys Thr Ala Leu
      355      360      365
Glu Ala His Arg Trp Ile His Arg Ser Cys Ser Glu Arg Arg Ala Trp
      370      375      380
Gln Gln Ala Val Val Gly Arg Ser Glu Pro Ile Pro Val Leu Gly Gly
385      390      395      400
Lys Asp Pro Pro Val His Phe Arg His Phe Pro Asp Ile Phe Gln Glu
      405      410      415
Phe Cys Gln Gln Arg Leu Gln Asp Arg Gly Val Pro Ser Asn Ala Pro
      420      425      430
Pro Val Pro Gly Gln Ser Pro Arg Ser Phe Phe Arg Asp Arg Arg Gln
      435      440      445
Ser Ser Ala Val Ala Tyr Cys Gly His Arg Gly Val Ser Glu Ala Ser

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450                      455                      460  
 Gly Pro Tyr Ile Phe Leu Glu Gly Lys Lys Pro Leu Leu Tyr Phe Pro  
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 Asp Thr Pro Pro Pro Pro Leu Glu Lys Ala Ala Glu Ala Ala Leu Phe  
                     485                      490                      495  
 Lys Gly Lys Trp Asp Asp Glu Ala Arg Glu Met Ala Pro Pro Pro Ala  
                     500                      505                      510  
 Pro Leu Leu Ala Pro Arg Pro Gly Glu Thr Arg Pro Gly Cys Arg Lys  
                     515                      520                      525  
 Pro Gly Thr Val Ser Phe Ala Asp Val Ala Val Tyr Phe Ser Pro Glu  
                     530                      535                      540  
 Glu Trp Gly Cys Leu Arg Pro Ala Gln Arg Ala Leu Tyr Arg Asp Val  
 545                      550                      555                      560  
 Met Gln Glu Thr Tyr Gly His Leu Gly Ala Leu Gly Phe Pro Gly Pro  
                     565                      570                      575  
 Lys Pro Ala Leu Ile Ser Trp Met Glu Gln Glu Ser Glu Ala Trp Ser  
                     580                      585                      590  
 Pro Ala Ala Gln Asp Pro Glu Lys Gly Glu Arg Leu Gly Gly Ala Arg  
                     595                      600                      605  
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                     610                      615                      620  
 Arg Ala Lys Gly Pro Arg Lys Ala Pro Val Lys Glu Ser Pro Glu Val  
 625                      630                      635                      640  
 Leu Val Glu Arg Asn Pro Asp Pro Ala Ile Ser Val Ala Pro Ala Arg  
                     645                      650                      655  
 Ala Gln Pro Pro Lys Asn Ala Ala Trp Asp Pro Thr Thr Gly Ala Gln  
                     660                      665                      670  
 Pro Pro Ala Pro Ile Pro Ser Met Asp Ala Gln Ala Gly Gln Arg Arg  
                     675                      680                      685  
 His Val Cys Thr Asp Cys Gly Arg Arg Phe Thr Tyr Pro Ser Leu Leu  
                     690                      695                      700  
 Val Ser His Arg Arg Met His Ser Gly Glu Arg Pro Phe Pro Cys Pro  
 705                      710                      715                      720  
 Glu Cys Gly Met Arg Phe Lys Arg Lys Phe Ala Val Glu Ala His Gln  
                     725                      730                      735  
 Trp Ile His Arg Ser Cys Ser Gly Gly Arg Arg Gly Arg Arg Pro Gly  
                     740                      745                      750  
 Ile Arg Ala Val Pro Arg Ala Pro Val Arg Gly Asp Arg Asp Pro Pro  
                     755                      760                      765  
 Val Leu Phe Arg His Tyr Pro Asp Ile Phe Glu Glu Cys Gly  
                     770                      775                      780

&lt;210&gt; 3967

&lt;211&gt; 892

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3967

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 180

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 780  
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 840  
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa  
 892

&lt;210&gt; 3968

&lt;211&gt; 151

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3968

Xaa Pro Ala Arg Pro Arg Arg Ala Arg Gly Gly Gly Arg Gly Arg Val  
 1 5 10 15  
 Val Ala Arg Gln Ile Leu Pro Arg Gly Arg Gly Arg Leu Val Gly Asp  
 20 25 30  
 Thr Val Val Phe Lys Asp Gly Gln Tyr Trp Ile Arg Gly Arg Thr Ser  
 35 40 45  
 Val Asp Ile Ile Lys Thr Gly Gly Tyr Lys Val Ser Ala Leu Glu Val  
 50 55 60  
 Glu Trp His Leu Leu Ala His Pro Ser Ile Thr Asp Val Ala Val Ile  
 65 70 75 80  
 Gly Val Pro Asp Met Thr Trp Gly Gln Arg Val Thr Ala Val Val Thr  
 85 90 95  
 Leu Arg Glu Gly His Ser Leu Ser His Arg Glu Leu Lys Glu Trp Ala  
 100 105 110  
 Arg Asn Val Leu Ala Pro Tyr Ala Val Pro Ser Glu Leu Val Leu Val  
 115 120 125  
 Glu Glu Ile Pro Arg Asn Gln Met Gly Lys Ile Asp Lys Lys Ala Leu  
 130 135 140  
 Ile Arg His Phe His Pro Ser  
 145 150

&lt;210&gt; 3969

&lt;211&gt; 915

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3969

```

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240
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360
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480
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720
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780
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900
aagaaaaaat atggc
915

```

&lt;210&gt; 3970

&lt;211&gt; 89

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3970

```

Met Gly Glu Val Glu Ala Pro Gly Arg Leu Trp Leu Glu Ser Pro Pro
1          5          10          15
Gly Gly Ala Pro Pro Ile Phe Leu Pro Ser Asp Gly Gln Ala Leu Val
20          25          30
Leu Gly Arg Gly Pro Leu Thr Gln Val Thr Asp Arg Lys Cys Ser Arg
35          40          45
Thr Gln Val Glu Leu Val Ala Asp Pro Glu Thr Arg Thr Val Ala Val
50          55          60
Lys Gln Val Ser Val Pro Leu Gln Gly Pro Ala Arg Pro Gly Asp Gly
65          70          75          80
Ile Trp Gly Gly Ile Ala Ser Arg Gln

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85

<210> 3971  
 <211> 433  
 <212> DNA  
 <213> Homo sapiens

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 60  
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 120  
 ctggggaacg ggtaatcaga gaaaccctca ctcatagggt ggtgcccttt atgcagagac  
 180  
 ttaaaggaag gagggaggtc ccctgacaga gagaatggta agtgcaaagg tcctgggtgg  
 240  
 gcttggtgtg aggaagagca aggccagtgt ggctggaaca gagtgagtga aggggagaga  
 300  
 gttgtaagca atgagcttag acaggaaatg gggctctgggt cacatgggaa atggtaggac  
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 ctaatcacca gaa  
 433

<210> 3972  
 <211> 120  
 <212> PRT  
 <213> Homo sapiens

<400> 3972  
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 1 5 10 15  
 Ser Leu Leu Thr Thr Leu Ser Pro Ser Leu Thr Leu Phe Gln Pro His  
 20 25 30  
 Trp Pro Cys Ser Ser Ser Thr Gln Ala His Pro Gly Pro Leu His Leu  
 35 40 45  
 Pro Phe Ser Leu Ser Gly Asp Leu Pro Pro Ser Phe Lys Ser Leu His  
 50 55 60  
 Lys Gly His His Pro Met Ser Glu Gly Phe Ser Asp Tyr Pro Phe Pro  
 65 70 75 80  
 Ser Arg Ala Leu Pro Ser Met Leu His Phe Phe Pro Arg Ala Leu Asn  
 85 90 95  
 Thr Thr Tyr Leu Ser Phe Ile Phe Ser Leu Ser Phe Phe Cys Leu Leu  
 100 105 110  
 Pro Leu Glu His His Gln Ser Arg  
 115 120

<210> 3973  
 <211> 984  
 <212> DNA  
 <213> Homo sapiens

<400> 3973

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 120  
 tgctccacct acttgcagtc cagatattac agggcccctg agatcatcct tggtttacca  
 180  
 ttttgtgagg caattgacat gtggtccctg ggctgtgtta ttgcagaatt gttcctgggt  
 240  
 tgcccggttat atccaggagc ttcggagtat gatcagattc ggtatatttc acaaacacag  
 300  
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 420  
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 cgggagttca ttgacctgtt gaagaagatg ctgaccattg atgctgacaa gagaatcact  
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 660  
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 780  
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 900  
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 984

&lt;210&gt; 3974

&lt;211&gt; 328

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3974

Leu	Gly	Leu	Ile	His	Ala	Asp	Leu	Lys	Pro	Glu	Asn	Ile	Met	Leu	Val
1				5					10					15	
Asp	Pro	Ser	Arg	Gln	Pro	Tyr	Arg	Val	Lys	Val	Ile	Asp	Phe	Gly	Ser
			20					25					30		
Ala	Ser	His	Val	Ser	Lys	Ala	Val	Cys	Ser	Thr	Tyr	Leu	Gln	Ser	Arg
			35				40					45			
Tyr	Tyr	Arg	Ala	Pro	Glu	Ile	Ile	Leu	Gly	Leu	Pro	Phe	Cys	Glu	Ala
	50					55				60					
Ile	Asp	Met	Trp	Ser	Leu	Gly	Cys	Val	Ile	Ala	Glu	Leu	Phe	Leu	Gly
65				70					75					80	
Trp	Pro	Leu	Tyr	Pro	Gly	Ala	Ser	Glu	Tyr	Asp	Gln	Ile	Arg	Tyr	Ile
			85					90					95		
Ser	Gln	Thr	Gln	Gly	Leu	Pro	Ala	Glu	Tyr	Leu	Leu	Ser	Ala	Gly	Thr

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<210> 3975
<211> 593
<212> DNA
<213> Homo sapiens
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120
gctcttgggg gctcaaggga gcctgggcct ctgccagcct gcaagctgcc tccaactctc
180
agtcaggatt tggatgcccc cagtgcagtc ctgaggccgc cgccccccat cctactatcc
240
tgcttctgag gcgtctcgga atcataggcc tcccgtggaa ggggagcagc aggcgaggtc
300
tgcgtgagcc ccacagatgc ccgctcgcct gccagactta aaagtctgtg cccctccccg
360
accaccaggg taccagatc ccaggcggct cagccaggcc cagagcccca agagctgggc
420
tgttctctcc aactgggatc tggggtaggg gctgctcccc caagtccctg ggggactgtc
480
tgggacatcc aggcctgtc ttcttgtctt aaccactcac aacagagaac acgatgttct
540

```

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593

<210> 3976

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3976

Met	Gly	Phe	Ser	Leu	Leu	Glu	Gly	Pro	Ala	Ser	Leu	Gln	Pro	Pro	His
1				5				10					15		
Arg	Glu	Ser	Leu	Pro	Leu	His	Ser	Leu	Pro	Arg	Asp	Gly	Ser	Trp	Gly
			20					25				30			
Leu	Lys	Gly	Ala	Trp	Ala	Ser	Ala	Ser	Leu	Gln	Ala	Ala	Ser	Asn	Ser
		35					40				45				
Gln	Ser	Gly	Phe	Gly	Cys	Pro	Gln	Cys	Ser	Pro	Glu	Ala	Ala	Ala	Pro
50					55				60						
His	Pro	Thr	Ile	Leu	Leu	Leu	Arg	Arg	Leu	Gly	Ile	Ile	Gly	Leu	Pro
65				70					75					80	
Trp	Lys	Gly	Ser	Ser	Arg	Arg	Gly	Leu	Arg	Glu	Pro	His	Arg	Cys	Pro
				85				90						95	
Leu	Ala	Cys	Gln	Thr											
				100											

<210> 3977

<211> 2668

<212> DNA

<213> Homo sapiens

<400> 3977

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120  
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180  
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240  
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300  
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360  
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420  
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480  
ccatctcaac agggccaagg tgggttacat ggaatctacc tgcgggcctt ctgcacaggg  
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600  
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660  
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720

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960  
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cgtctcaagc agcagccact cttcagcttg gtggactttg aacaggtggt ggatcgcat  
1260  
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1320  
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1380  
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1680  
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2340

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 2668

<210> 3978

<211> 667

<212> PRT

<213> Homo sapiens

<400> 3978

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Phe	Thr	Trp	Asn	Lys	Arg	Ser	Gly	Leu	Gln	Val	Ser	Gln	Asp	Phe	Pro
			20					25					30		
Phe	Leu	His	Pro	Ser	Glu	Thr	Ser	Val	Leu	Asn	Arg	Leu	Cys	Arg	Leu
		35					40					45			
Gly	Thr	Asp	Tyr	Ile	Arg	Phe	Thr	Glu	Phe	Ile	Glu	Gln	Tyr	Thr	Gly
	50					55					60				
His	Val	Gln	Gln	Gln	Asp	His	His	Pro	Ser	Gln	Gln	Gly	Gln	Gly	Gly
65					70					75				80	
Leu	His	Gly	Ile	Tyr	Leu	Arg	Ala	Phe	Cys	Thr	Gly	Leu	Asp	Ser	Val
				85					90					95	
Leu	Gln	Pro	Tyr	Arg	Gln	Ala	Leu	Leu	Asp	Leu	Glu	Gln	Glu	Phe	Leu
			100					105					110		
Gly	Asp	Pro	His	Leu	Ser	Ile	Ser	His	Val	Asn	Tyr	Phe	Leu	Asp	Gln
		115					120						125		
Phe	Gln	Leu	Leu	Phe	Pro	Ser	Val	Met	Val	Val	Val	Glu	Gln	Ile	Lys
	130					135						140			
Ser	Gln	Lys	Ile	His	Gly	Cys	Gln	Ile	Leu	Glu	Thr	Val	Tyr	Lys	His
145					150					155				160	
Ser	Cys	Gly	Gly	Leu	Pro	Pro	Val	Arg	Ser	Ala	Leu	Glu	Lys	Ile	Leu
			165						170					175	
Ala	Val	Cys	His	Gly	Val	Met	Tyr	Lys	Gln	Leu	Ser	Ala	Trp	Met	Leu
			180					185						190	
His	Gly	Leu	Leu	Leu	Asp	Gln	His	Glu	Glu	Phe	Phe	Ile	Lys	Gln	Gly
		195					200					205			
Pro	Ser	Ser	Gly	Asn	Val	Ser	Ala	Gln	Pro	Glu	Glu	Asp	Glu	Glu	Asp
	210					215						220			
Leu	Gly	Ile	Gly	Gly	Leu	Thr	Gly	Lys	Gln	Leu	Arg	Glu	Leu	Gln	Asp
225					230					235				240	
Leu	Arg	Leu	Ile	Glu	Glu	Asn	Met	Leu	Ala	Pro	Ser	Leu	Lys	Gln	
			245					250						255	
Phe	Ser	Leu	Arg	Val	Glu	Ile	Leu	Pro	Ser	Tyr	Ile	Pro	Val	Arg	Val
			260					265					270		
Ala	Glu	Lys	Ile	Leu	Phe	Val	Gly	Glu	Ser	Val	Gln	Met	Phe	Glu	Asn

275	280	285
Gln Asn Val Asn Leu Thr Arg Lys Gly Ser Ile Leu Lys Asn Gln Glu		
290	295	300
Asp Thr Phe Ala Ala Glu Leu His Arg Leu Lys Gln Gln Pro Leu Phe		
305	310	315
Ser Leu Val Asp Phe Glu Gln Val Val Asp Arg Ile Arg Ser Thr Val		
325	330	335
Ala Glu His Leu Trp Lys Leu Met Val Glu Glu Ser Asp Leu Leu Gly		
340	345	350
Gln Leu Lys Ile Ile Lys Asp Phe Tyr Leu Leu Gly Arg Gly Glu Leu		
355	360	365
Phe Gln Ala Phe Ile Asp Thr Ala Gln His Met Leu Lys Thr Pro Pro		
370	375	380
Thr Ala Val Thr Glu His Asp Val Asn Val Ala Phe Gln Gln Ser Ala		
385	390	395
His Lys Val Leu Leu Asp Asp Asp Asn Leu Leu Pro Leu Leu His Leu		
405	410	415
Thr Ile Glu Tyr His Xaa Glu Arg Ser Thr Lys Met Leu Leu Arg Xaa		
420	425	430
Arg Glu Gly Pro Ser Arg Glu Thr Ser Pro Arg Glu Ala Pro Ala Ser		
435	440	445
Gly Trp Ala Ala Leu Gly Leu Ser Tyr Lys Val Gln Trp Pro Leu His		
450	455	460
Ile Leu Phe Thr Pro Ala Val Leu Glu Lys Tyr Asn Val Val Phe Lys		
465	470	475
Tyr Leu Leu Ser Val Arg Arg Val Gln Ala Glu Leu Gln His Cys Trp		
485	490	495
Ala Leu Gln Met Gln Arg Lys His Leu Lys Ser Asn Gln Thr Asp Ala		
500	505	510
Ile Lys Trp Arg Leu Arg Asn His Met Ala Phe Leu Val Asp Asn Leu		
515	520	525
Gln Tyr Tyr Leu Gln Val Asp Val Leu Glu Ser Gln Phe Ser Gln Leu		
530	535	540
Leu His Gln Ile Asn Ser Thr Arg Asp Phe Glu Ser Ile Arg Leu Ala		
545	550	555
His Asp His Phe Leu Ser Asn Leu Leu Ala Gln Ser Phe Ile Leu Leu		
565	570	575
Lys Pro Val Phe His Cys Leu Asn Glu Ile Leu Asp Leu Cys His Ser		
580	585	590
Phe Cys Ser Leu Val Ser Gln Asn Leu Gly Pro Leu Asp Glu Arg Gly		
595	600	605
Ala Ala Gln Leu Ser Ile Leu Val Lys Gly Phe Ser Arg Gln Ser Ser		
610	615	620
Leu Leu Phe Lys Ile Leu Ser Ser Val Arg Asn His Gln Ile Asn Ser		
625	630	635
Asp Leu Ala Gln Leu Leu Leu Arg Leu Asp Tyr Asn Lys Tyr Tyr Thr		
645	650	655
Gln Ala Gly Gly Thr Leu Gly Ser Phe Gly Met		
660	665	

&lt;210&gt; 3979

&lt;211&gt; 2746

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3979

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120  
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180  
tctatgcgaa gcaccgacgc agccatgagt acctgcgggg cttcactctg tgccacaacg  
240  
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300  
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720  
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&lt;210&gt; 3980

&lt;211&gt; 478

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3980

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&lt;210&gt; 3982

&lt;211&gt; 929

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3982

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Cys Leu Leu Arg Leu Tyr Arg Thr Ser Pro Asp Leu Val Pro Met Gly
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Asp Trp Thr Ser Arg Val Val His Leu Leu Asn Asp Gln His Leu Gly
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Val Val Thr Ala Ala Thr Ser Leu Ile Thr Thr Leu Ala Gln Lys Asn
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Cys Tyr Pro Pro Pro Asp Pro Ala Val Arg Gly Arg Leu Thr Glu Cys
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&lt;212&gt; PRT

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 Ile Ser Glu Lys Val Leu Thr Lys Glu Val Glu Leu Asp Arg Leu Arg